

4. DIMENSIONAL REGULATIONS

4.1 Basic Requirements

4.1.1 Applicability

No building or structure in any district shall be located, constructed, changed, enlarged or permitted and no use of premises in any district shall be permitted which does not conform to the density and dimensional regulations as set forth herein.

4.1.2 Exemptions for Recorded Lots

Nothing contained in Section 4.2 shall prevent the construction or placing of buildings or structures permissible as accessory uses under the provisions of this By-Law, nor shall it prevent the construction or placing of a building or structure upon a lot having less area or frontage, or both, than required in Section 4.2 if, at such time as the minimum area and frontage requirements for the Zone in which such lot is located were established or increased, such lot had less area or frontage, or both than provided by such new or increased requirements; and if such less area or frontage, or both did not result from an attempt to circumvent the intent of the By-Law, and if at the effective date of such new or increased requirements or January 10, 1963, whichever date is later, the owner did not have adjoining land available to increase the area or frontage, or both, of said lot to meet said new or increased requirement, or to make said lot less non-conforming as to frontage or area or both. The minimum area and frontage of any such lot shall be at least 5,000 square feet and 50 feet, respectively.

4.1.3 Reduction of Area, Frontage, and Setback Requirements

No lot shall be reduced in area or frontage if it already has or will be caused to have less area or frontage than required by this section, except by a taking by eminent domain or a conveyance for a public purpose. Such lots reduced in area or frontage by a taking by eminent domain or a conveyance for a public purpose shall be entitled to the protections afforded by statute and in this By-Law to pre-existing nonconforming lots. Further, if an existing structure is rendered nonconforming as to setback (or more non-conforming as to setback) by a taking by eminent domain or conveyance for a public way or access way or by the approval of a subdivision way for a third party, said structure shall be entitled to the protections afforded by statute and in this By-Law to pre-existing nonconforming structures. Notwithstanding the foregoing, the protections afforded by this section shall not apply to vacant lots existing prior to the effective date of this section which are less than 5,000 sq. ft. and/or with less than 50 feet of frontage.

4.1.4 Change of Subdivision Plans

Where the plan of a subdivision has been approved by the Planning Board or by a Board of Survey, or where a plan of the subdivision of land has been recorded in the Registry of Deeds by a

former owner of said land prior to March 26, 1925, and where either a minimum area or frontage for building lots has since been established for the district in which said land lies, or the minimum area or frontage for building lots applicable to said district has since been increased, the Planning Board may, upon the application of the present owner of said land, approve a change in said subdivision plan whereby the area and frontage of the building lots shown thereon may be increased although the area and frontage of said building lots as changed shall not then be as large as the required minimum area of frontage for building lots currently applicable to the zoning district in which said land lies. The approval of such change shall not, however, affect the location or grade of streets as shown on said plan or profile; nor shall it impose additional obligations upon the owner of said land with respect to the development thereof.

4.1.5 Minimum Required Lot Width

Building lots in all zoning districts recorded or endorsed after January 9, 1986 shall be required to have a minimum lot width for a distance that extends from the front line throughout the primary building or structure not less than the applicable minimum frontage for the district in which said lot is located, as specified in Sections 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.3.1, 4.4.1, and 4.6.1; except, however, in the Single Residence A District such minimum required lot width shall be at least 120 feet. To measure lot width, start at a front corner (where a sideline meets the lot's line of frontage) and, at a right angle to that sideline, measure straight across the lot to the other sideline. This measurement need not be at a right angle from more than one sideline but it must cross the lot to meet the opposite sideline. Then take a series of measurements parallel to that first measured line, through the full depth of the primary building or structure on the lot. If any lot line on the side chosen for the starting point is a convex line, draw a straight line connecting the two far points of the convex line, and measure across the lot from that straight line; and if any lot line on the side chosen for the starting point is a concave line, draw a straight line connecting the two far points of that line and begin there, but measure across the lot from the point where the perpendicular line crosses the concave side lot line. For corner lots, the measurement shall be taken from front corners along both frontage lines.

4.1.6 Height and Setback Limitation Exception

4.1.6.1 Special Permit Uses

In all Districts, the Board of Appeals may by special permit approve an application for an increase in the height limits of this By-Law for light poles that illuminate outdoor recreation facilities, such as, but not limited to, playing fields and tennis courts, that are located on land owned by the Town of Needham and which are operated as a recreational or municipal use. In determining whether to grant a special permit, and in determining what conditions should be attached to the grant of a special permit, the Board of Appeals shall take into account the application's compliance with the lighting standards, and other decision standards, set forth in this Section 4.1.6, and its compliance with the provisions of Section 7.5.2 of this by-law.

4.1.6.2 Definitions

Certified Lighting Professional – A lighting professional that is certified by the National Council on Qualifications for Lighting Professionals (NCQLP) or a State licensed professional engineer, architect or landscape architect having at least 3 years of sports lighting-related experience.

Direct Light – Light emitted directly from the lamp, from the reflector or reflector diffuser, or through the refractor or diffuser lens of a luminaire.

Foot Candle (fc) – Unit of illuminance; One lumen per square foot.

Full Cutoff (FCO) – A luminaire light distribution, specified by the IESNA, where zero candela intensity occurs at an angle of 90 degrees above nadir, and at all greater angles from nadir. Additionally, the candela per 1000 lamp lumens does not numerically exceed 100 (10 percent) at a vertical angle of 80 degrees above nadir. Nadir is the point directly vertically below the luminaire. A FCO luminaire is fully shielded.

Fully Shielded – Constructed in such a manner that no light emitted by the fixture, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the luminaire, is projected above a horizontal plane passing through the lowest direct-light-emitting part of the luminaire.

Glare – The sensation of visual discomfort or loss in visual performance and visibility produced by luminance within the visual field that is sufficiently greater than the luminance to which the eyes are adapted.

Indirect Light – Direct Light that has been reflected off the surface of any permanently constructed object other than the source luminaire.

IESNA or IES – Illuminating Engineering Society of North America. A professional association of lighting engineers and lighting manufacturers generally recognized as the definitive source for illumination recommendations in the United States. An IES photometric file is defined by IESNA standards.

Illuminance – The luminous flux incident per unit area, expressed in foot-candle (one lumen per square foot). Horizontal or vertical illuminance is that measured with a photometer cell mounted horizontally or vertically.

Lamp – The light source component of a luminaire that produces the actual light.

Light Trespass – Direct or Indirect Light produced by an artificial light source and which shines outside the boundaries of the lot containing the luminaire.

Luminaire – A complete outdoor lighting unit or fixture including a lamp or lamps, together with the parts designed to distribute the light, to position and protect the lamps, and to connect the lamps to the power supply, but not including a pole on which the luminaire may be mounted.

Outdoor Lighting – The night-time illumination of an outside area or object by a luminaire located outdoors.

Shielded – A luminaire employing a protective device to prevent glare. The luminaire shall have a generally downward distribution of light and must have a top shield to minimize upward light.

4.1.6.3 Exterior Lighting Plan

A Lighting Plan shall be submitted with all applications for a special permit. This Lighting Plan shall be certified to be valid and correct by a certified lighting professional and shall include the following information:

- a) The location, height, shielding type of all existing and proposed outdoor luminaries, and the wattage rating and type of all lamps in each luminaire. Any existing off-site luminaries used to illuminate the lot shall be included in the Lighting Plan.
- b) The manufacturer's specification data and technical drawings, including the luminaire lamp wattage; photometric data showing that the luminaire is fully shielded, including an electronic copy of the IES photometric file, or a reference to the file location on the manufacturer's web site. Manufacturer's photometric specification that the luminaire is rated IESNA Full Cutoff (FCO) is sufficient to show that it is fully shielded.
- c) The data of previous sections a) and b) shall be organized into a table, with one line per luminaire.
- d) A light illumination test, conducted by a certified lighting professional, to demonstrate the pre-development condition. The lighting levels shall be calculated with a photometer positioned at the boundaries of the lot on which the light poles are proposed, at such locations as are needed to adequately determine the level of existing light trespass onto adjacent streets and abutting lots.
- e) A photometric plan of the proposed outdoor luminaries, showing the intensity of illumination expressed in foot-candles at ground level within the interior of the property and at the boundaries of the lot on which the light poles are proposed, at such locations as are needed to adequately determine the level of light trespass onto adjacent streets and abutting lots. The plan shall also include the following illumination information in a table format: Minimum; Maximum; Average; Average to Minimum and Maximum to Minimum.

f) Calculations quantifying the light trespass of the proposed outdoor luminaries, at the property boundaries of each abutting lot and street.

4.1.6.4 Lighting and Light Pole Standards

The following lighting and light pole standards shall apply to illuminated outdoor recreation facilities:

a) The illumination of outdoor recreation facilities shall be by either shielded or fully-shielded luminaries, aimed toward the playing field or court, and shielded in directions away from the playing surface so as to minimize glare, lighting and light trespass onto adjacent areas. Light poles for recreational facilities may be as high as necessary to adequately illuminate the facility but shall be limited to a maximum height of 90 feet and a minimum front, rear or side yard setback of five (5) feet.

b) Additional shields that are installed to control light trespass and glare as required herein shall be designed so that the parts of the shields that are exposed to the direct light of the luminaire and visible from streets, or abutting lots that are in residential or conservation use, shall have a flat-back, low reflectivity finish.

c) Luminaries installed on one lot to illuminate another lot, or installed in a street, railroad, utility, or other right-of-way to illuminate an adjacent lot, are prohibited.

d) Strobe and flashing lights and laser illumination are prohibited.

e) Placement of pennants, streamers, banners, signs, advertising flags or similar items on light poles is prohibited.

f) Placement of speakers, sound systems or similar devices on light poles is prohibited.

g) Hours and method of operation shall be set by the Board of Appeals, as it deems necessary.

h) The luminaries shall be located and shielded so as to prevent undue light trespass onto adjacent streets or abutting lots. In determining undue light trespass the Board of Appeals shall consider the following factors:

- (1) the land use of adjacent properties, and the location of residences and businesses thereon;
- (2) the character of the abutting neighborhood (urban, suburban, rural);
- (3) other existing light sources in the immediate vicinity of the lot;
- (4) distance from the proposed light sources to abutting properties;
- (5) the topography of the site and of adjacent property;
- (6) existing and proposed landscaping, vegetation, and natural and artificial screening; and

(7) existing and proposed direct and indirect light levels on the site and in the immediate vicinity of the site.

i) After the installation of the lights, a post-development light illumination test shall be conducted at the property lines and shall demonstrate that there has been no undue light trespass at the property lines, before the lights can be operated.

j) Submission and subsequent approval of a plan does not relieve the applicant of responsibility to demonstrate conformity to all sections of the bylaw, both in the individual luminaries as built, and for the entire lot as built. The certified lighting professional shall submit an as-built plan that correctly reflects the as-built installation, and shall certify that the as-built installation conforms to the requirements of this By-Law.

4.1.6.5 Special Permit Approval Criteria

In reviewing a special permit application under this section 4.1.6, the Board of Appeals shall make findings regarding the following factors:

a) the effects of extended operational hours, such as noise, traffic, light trespass and celebratory behavior;

b) the benefits that the additional hours of operation will provide;

c) the degree to which the proposal minimizes adverse visual impacts;

d) the extent to which the applicant has mitigated potential adverse effects;

e) compliance with the lighting and light pole standards of sections 4.1.6.4, including a determination as to whether the proposal would result in undue light trespass; and

f) compliance with the provisions of section 7.5.2.

After making findings on the factors set forth above, the Board shall determine whether the benefits, if any, of the proposed project outweigh its adverse impacts, if any. If the Board determines that the proposal would provide a net benefit to the Town, the Board may grant a special permit with or without specific conditions.

4.2 Dimensional Regulations for Rural Residence-Conservation, Single Residence A, Single Residence B, General Residence, and Institutional Districts.

The terms used in the Table of Regulations in Sections 4.2.1, 4.2.2 and 4.2.3 below are as defined in Section 1.3 of the By-law except as otherwise noted below.

The symbol “NR” means no requirements.

The symbol “1/2” as to maximum stories means Half-story under Story as defined in Section 1.3 of the By-Law.

The term “New Construction” means any one or any combination of the following: (a) Any construction of a structure on a vacant lot; (b) Any construction which involves demolition of more than 50% (fifty percent) of the building shell exclusive of demolition of a single story attached garage. For purposes of calculating the percentages of any demolition under this definition, all demolition shall be taken into account which commenced, or could have commenced, pursuant to an issued permit within two (2) years prior to the date of any request for any permit to construct, re-construct, alter, add, extend or otherwise structurally change any structure.

Front Yard Setback - the minimum horizontal distance from a front lot line of a lot to the nearest portion of the exterior wall sheathing of a building or structure. The following elements are permitted in the front yard setback: (i) uncovered steps; (ii) roof overhangs projecting not more than 2 feet from the wall of a building; (iii) siding and trim projecting not more than 6 inches from the wall of a building; (iv) first floor bay windows that do not have a foundation nor create any floor area nor project more than 2 feet from the wall of a building, provided that the width of a single bay window is limited to 8 feet, total overall area of a bay or bays is limited to 25% of the first floor wall area where the bay or bays are installed, and roofs on bay windows may project an additional 6 inches into the setback; and (v) unenclosed, covered or uncovered landings or entrance porches located on the first floor and having no habitable space directly above, provided that no more than a maximum of 50 square feet of said landing or porch is allowed in the front setback and the maximum porch or landing projection into the front setback is limited to 5 feet.

Side Yard Setback - the minimum horizontal distance from a side line of a lot to the nearest portion of the exterior wall sheathing of a building or structure. The following elements are permitted in the side yard setback: (i) uncovered steps; (ii) roof overhangs projecting not more than 2 feet from the wall of a building; (iii) siding and trim projecting not more than 6 inches from the wall of a building; (iv) unenclosed, covered or uncovered landings which neither exceed a total area of 25 square feet nor project more than 4 feet from the face of a building; (v) first floor bay windows that do not have a foundation nor create any floor area nor project more than 2 feet from the wall of a building, provided that the width of a single bay window is limited to 8 feet, total overall area of a bay or bays is limited to 25% of the first floor wall area where the bay or bays are installed, and roofs on bay windows may project an additional 6 inches into the setback; (vi) attached chimneys and fireplace enclosures projecting not more than 2 feet from the wall of a building; and (vii) covered

basement entrances (bulkheads) which neither exceed a total area of 40 square feet nor a maximum height of 3.5 feet nor project more than 7.5 feet from the wall of a building.

Rear Yard Setback - the minimum horizontal distance from the rear line of a lot to the nearest portion of the exterior wall sheathing of a building or structure. The following elements are permitted in the rear yard setback: (i) uncovered steps; (ii) roof overhangs projecting not more than 2 feet from the wall of a building; (iii) siding and trim projecting not more than 6 inches from the wall of a building; (iv) unenclosed, covered and uncovered landings which neither exceed a total area of 25 square feet nor project more than 4 feet from the face of a building; (v) first floor bay windows that do not have a foundation nor create any floor area nor project more than 2 feet from the wall of a building, provided that the width of a single bay window is limited to 8 feet, total overall area of a bay or bays is limited to 25% of the first floor wall area where the bay or bays are installed, and roofs on bay windows may project an additional 6 inches into the setback; (vi) attached chimneys and fireplace enclosures projecting not more than 2 feet from the wall of a building; and (vii) covered basement entrances (bulkheads) which neither exceed a total area of 40 square feet nor a maximum height of 3.5 feet nor project more than 7.5 feet from the wall of a building.

The term "Floor Area Ratio" means the floor area divided by the lot area. Floor area shall be the sum of the horizontal areas of the several floors of each building on a lot, as measured from the exterior faces of the exterior walls, but excluding basements, attics, half-stories located directly above the second floor, unenclosed porches, and up to 600 square feet of floor area intended and designed for the parking of automobiles whether in accessory buildings or structures, or in main buildings or structures.

Height - Height shall be measured using one of the following two alternative methods, the method to be determined at the discretion of the applicant: (1) the vertical distance from average original grade or finished grade, whichever is lower, of the land surrounding the footprint of the structure to the highest point of a structure or roof of a building. The average height shall be measured starting at one corner of the structure measuring the height of the structure to the highest point above grade, and measurements shall be taken every 10 linear feet. The height limit under this method is 35 feet. For purposes of this alternative, original grade shall be defined as the grade of the lot before any regrading, demolition or development begins. If an existing structure is to be demolished, the original grade shall be the grade determined prior to demolition of the structure. If there is no existing structure on the property, the natural grade of the property, prior to any modification, shall be considered the original grade; except in new subdivisions where the original grade shall mean the approved and recorded grade; or (2) the height of the structure measured from a single point in the street centerline which is the average elevation of the highest 1/3 of the property's street frontage. The height limit under this method is 32 feet.

Lot Coverage - that portion of a lot that is covered or occupied by any building or structure, but excluding unenclosed, covered or uncovered landings or porches (unless such covered landings or porches have habitable space directly above), steps, roof overhangs, bay windows, chimneys and bulkheads as permitted in required setbacks as provided above, as well as outdoor fireplaces, decks, patios and pools.

4.2.1 Table of Regulations for Rural Residence-Conservation, Single Residence A, Single Residence B, and General Residence Districts, for Buildings and Structures on Lots Created by Deed or Plan Endorsed or Recorded Prior to January 9, 1986 and Not Including New Construction

Except as otherwise provided in Section 4.2.4 for public, semi-public and institutional uses, no building or structure that is not New Construction shall be constructed, altered, or relocated on any lot created by deed or plan endorsed or recorded prior to January 9, 1986 except in conformance with these regulations:

District	Min. Lot Area (sf)	Min. Frontage (ft)	Front Setback (ft)	Side Setback (ft)	Rear Setback (ft)	Max. Floor Area Ratio (F.A.R.)	Max. % Lot Coverage	Max. Stories	Max. Height (ft)
Rural Residence Conservation	43,560	150	50	25	25	NR	15%	2-1/2	35
Single Residence A	43,560	150	30	15 (a)	15 (a)	NR	NR	2-1/2	35
Single Residence B	10,000	80	20 (g)(h)	14 (e)(f)	10	.36-.38(d)	25%-30% (i)	2-1/2	35 (b)(c)
General Residence	10,000	80	20 (g)(h)	14 (e) (f)	10	NR	30%-35% (j)	2-1/2	35 (b)(c)

(a) Notwithstanding the foregoing, in the Single Residence A District, a change in the area, frontage or configuration of an existing improved lot created by deed or plan, endorsed or recorded before January 9, 1986, which includes a conforming structure or building shall not change the minimum side or rear line setback requirement of 15 feet provided that (i) no other dimensional violations of the By-Law are created as a result of such change in the area, frontage or configuration of such existing improved lot, (ii) such lot otherwise continues to be a conforming lot in terms of minimum lot area, frontage and build factor following such change in the area, frontage or configuration of such existing improved lot, and (iii) such change in the area, frontage or configuration of such existing improved lot does not result in the creation of any additional building lot. The deed conveying land by reference to a plan showing such change in

the area, frontage or configuration of such existing improved lot shall contain a restriction affecting the land of both the grantor and the grantee prohibiting the creation of an additional building lot as a result of such conveyance.

- (b) The maximum height at any point of any building or structure shall not exceed 41 feet above the lower of original or finished grade.*
- (c) If all or a portion of a basement wall is exposed for the full height of the wall, dormers in the one-half story above the basement wall shall not be permitted.*
- (d) The maximum floor area ratio shall be as follows: for lots containing less than 12,000 square feet – .38; and for lots containing 12,000 or more square feet – .36.*
- (e) The minimum side yard setback is 14 feet as measured parallel to the side lot line, and a maximum of 32 linear feet of structure may be built at or farther back from 14 feet, provided that any additional length of structure in the side yard in excess of 32 linear feet must be offset an additional 2 feet. Notwithstanding the above, the minimum side yard setback requirement for all buildings and structures on any lot that contains less than 80 feet of frontage shall be 12 feet as measured parallel to the side lot line, and a maximum of 32 linear feet of structure may be built at or farther back from 12 feet, provided that any additional length of structure in excess of 32 linear feet must be offset an additional 2 feet. In no case shall a side wall extension extend more than 32 linear feet without a 2 foot offset, regardless of an increased side setback.*
- (f) Existing single family or two-family structures non-conforming for side yard setback and for which the building permit for the existing structure was issued prior to June 1, 2017, may be altered or structurally changed as-of-right to a 10-foot setback, notwithstanding the provisions of Section 1.4.7.2, provided any demolition of the existing structure does not exceed 50% of the building shell exclusive of demolition of a single story attached garage and further provided that the structure shall not be closer to the side lot line than the farthest extent of the existing structure. For the purposes of this footnote, the definition of “setback” in Section 1.3 of these By-Laws shall control.*
- (g) Attached garages shall have a minimum front yard setback of 25 feet. For corner lots the increased front yard setback of 25 feet is required along both frontage streets.*
- (h) Existing single family or two-family structures non-conforming for front yard garage setback and for which the building permit for the existing structure was issued prior to June 1, 2017, may be altered or structurally changed as-of-right to a 20-foot setback, notwithstanding the provisions of Section 1.4.7.2, provided any demolition of the existing structure does not exceed 50% of the building shell exclusive of demolition of a single story attached garage and further provided that the garage structure shall not be closer to the front lot line than the farthest extent of the existing garage structure. For the purposes of this footnote, the definition of “setback” in Section 1.3 of these By-Laws shall control.*
- (i) Buildings and structures created on any lot shall not result in lot coverage exceeding the following specified maximum percentages of the area of such lot: For lots containing less than 5,500 square feet – 30%; For lots containing at least 5,500 square feet but less than 6,000 square feet – 29%; For lots containing at least 6,000 square feet but less than 6,500 square feet – 28%; For lots containing at least 6,500 square feet but less than 7,000 square feet – 27%; For lots containing at least 7,000 square feet but less than 7,500 square feet – 26%; and For lots containing at least 7,500 square feet – 25%.*

- (j) *Buildings and structures created on any lot shall not result in lot coverage exceeding the following specified maximum percentages of the area of such lot: For lots containing less than 7,000 square feet – 35%; For lots containing at least 7,000 square feet but less than 7,500 square feet – 34%; For lots containing at least 7,500 square feet but less than 8,000 square feet – 33%; For lots containing at least 8,000 square feet but less than 8,500 square feet – 32%; For lots containing at least 8,500 square feet but less than 9,000 square feet – 31%; For lots containing at least 9,000 square feet – 30%.*

4.2.2 Table of Regulations for Rural Residence-Conservation, Single Residence A, Single Residence B, and General Residence Districts, for Buildings and Structures, on Lots Created by Deed or Plan, Endorsed or Recorded on or After January 9, 1986 and Not Including New Construction

Except as otherwise provided in Section 4.2.4 for public, semi-public and institutional uses, no building or structure that is not New Construction shall be constructed, altered, or relocated on any lot created by deed or plan endorsed or recorded on or after January 9, 1986 except in conformance with these regulations:

District	Min. Lot Area (sf)	Min. Frontage (ft)	Front Setback (ft)	Side Setback (ft)	Rear Setback (ft)	Max. Floor Area Ratio (F.A.R.)	Max. % Lot Coverage	Max. Stories	Max. Height (ft)
Rural Residence Conservation	43,560	150	50	25	25	NR	15%	2-1/2	35
Single Residence A	43,560	150	30	25	15	NR	NR	2-1/2	35
Single Residence B	10,000	80	20 (f)(g)	14 (a)(e)	10	.36-.38 (d)	25%-30% (h)	2-1/2	35 (b)(c)
General Residence	10,000	80	20 (f)(g)	14 (a)(e)	10	NR	30%-35% (i)	2-1/2	35 (b)(c)

- (a) *The minimum side yard setback is 14 feet as measured parallel to the side lot line, and a maximum of 32 linear feet of structure may be built at or farther back from 14 feet, provided that any additional length of structure in the side yard in excess of 32 linear feet must be offset an additional 2 feet. Notwithstanding the above, the minimum side yard setback requirement for all buildings and structures on any lot that contains less than 80 feet of frontage shall be 12 feet as measured parallel to the side lot line, and a maximum of 32 linear feet of structure may be built at or farther back from 12 feet, provided that any additional length of structure in excess of 32 linear feet must be offset an additional 2 feet. In no case shall a side wall extension extend more than 32 linear feet without a 2 foot offset, regardless of an increased side setback.*
- (b) *The maximum height at any point of any building or structure shall not exceed 41 feet above the lower of original or finished grade.*
- (c) *If all or a portion of a basement wall is exposed for the full height of the wall, dormers in the one-half story above the basement wall shall not be permitted.*
- (d) *The maximum floor area ratio shall be as follows: for lots containing less than 12,000 square feet – .38; and for lots containing 12,000 or more square feet – .36.*
- (e) *Existing single family or two-family structures non-conforming for side yard setback and for which the building permit for the existing structure was issued prior to June 1, 2017, may be altered or structurally changed as-of-right to a 12.5 foot setback, notwithstanding the provisions of Section 1.4.7.2, provided any demolition of the existing structure does not exceed 50% of the building shell exclusive of demolition of a single story attached garage and further provided that the structure shall not be closer to the side lot line than the farthest extent of the existing structure. For the purposes of this footnote, the definition of “setback” in Section 1.3 of these By-Laws shall control.*
- (f) *Attached garages shall have a minimum front yard setback of 25 feet. For corner lots the increased front yard setback of 25 feet is required along both frontage streets.*
- (g) *Existing single family or two-family structures non-conforming for front yard garage setback and for which the building permit for the existing structure was issued prior to June 1, 2017, may be altered or structurally changed as-of-right to a 20-foot setback, notwithstanding the provisions of Section 1.4.7.2, provided any demolition of the existing structure does not exceed 50% of the building shell exclusive of demolition of a single story attached garage and further provided that the garage structure shall not be closer to the front lot line than the farthest extent of the existing garage structure. For the purposes of this footnote, the definition of “setback” in Section 1.3 of these By-Laws shall control.*
- (h) *Buildings and structures created on any lot shall not result in lot coverage exceeding the following specified maximum percentages of the area of such lot: For lots containing less than 5,500 square feet – 30%; For lots containing at least 5,500 square feet but less than 6,000 square feet – 29%; For lots containing at least 6,000 square feet but less than 6,500 square feet – 28%; For lots containing at least 6,500 square feet but less than 7,000 square feet – 27%; For lots containing at least 7,000 square feet but less than 7,500 square feet – 26%; and For lots containing at least 7,500 square feet – 25%.*
- (i) *Buildings and structures created on any lot shall not result in lot coverage exceeding the following specified maximum percentages of the area of such lot: For lots containing less than 7,000 square feet – 35%; For lots containing at least 7,000 square feet but less than 7,500*

square feet – 34%; For lots containing at least 7,500 square feet but less than 8,000 square feet – 33%; For lots containing at least 8,000 square feet but less than 8,500 square feet – 32%; For lots containing at least 8,500 square feet but less than 9,000 square feet – 31%; For lots containing at least 9,000 square feet – 30%.

4.2.3 Table of Regulations for Rural Residence-Conservation, Single Residence A, Single Residence B, and General Residence Districts, for Buildings and Structures Created Through New Construction on any Lot

Except as otherwise provided in Section 4.2.4 for public, semi-public and institutional uses, no building or structure created through New Construction shall be constructed, altered, or relocated on any lot except in conformance with these regulations:

District	Min. Lot Area (sf)	Min. Frontage (ft)	Front Setback (ft)	Side Setback (ft)	Rear Setback (ft)	Max. Floor Area Ratio (F.A.R.)	Max. % Lot Coverage	Max. Stories	Max. Height (ft)
Rural Residence Conservation	43,560	150	50	25	25	NR	15%	2-1/2	35
Single Residence A	43,560	150	30	25	15	NR	NR	2-1/2	35
Single Residence B	10,000	80	20 (h)(i)	14 (a)(j)	20	.36-.38 (g)	25%-30% (b)	2-1/2	35 (e)(f)
General Residence	10,000	80	20 (h)(i)	14 (a)(j)	20	NR	30%-35% (c)	2-1/2	35 (e)(f)

(a) The minimum side yard setback is 14 feet as measured parallel to the side lot line, and a maximum of 32 linear feet of structure may be built at or farther back from 14 feet, provided that any additional length of structure in the side yard in excess of 32 linear feet must be offset an additional 2 feet. Notwithstanding the above, the minimum side yard setback requirement for all buildings and structures on any lot that contains less than 80 feet of frontage shall be 12 feet as measured parallel to the side lot line, and a maximum of 32 linear feet of structure may be built at or farther back from

12 feet, provided that any additional length of structure in excess of 32 linear feet must be offset an additional 2 feet. In no case shall a side wall extension extend more than 32 linear feet without a 2 foot offset, regardless of an increased side setback.

- (b) Buildings and structures created on any lot shall not result in lot coverage exceeding the following specified maximum percentages of the area of such lot: For lots containing less than 5,500 square feet – 30%; For lots containing at least 5,500 square feet but less than 6,000 square feet – 29%; For lots containing at least 6,000 square feet but less than 6,500 square feet – 28%; For lots containing at least 6,500 square feet but less than 7,000 square feet – 27%; For lots containing at least 7,000 square feet but less than 7,500 square feet – 26%; and For lots containing at least 7,500 square feet – 25%.*
- (c) Buildings and structures created on any lot shall not result in lot coverage exceeding the following specified maximum percentages of the area of such lot: For lots containing less than 7,000 square feet – 35%; For lots containing at least 7,000 square feet but less than 7,500 square feet – 34%; For lots containing at least 7,500 square feet but less than 8,000 square feet – 33%; For lots containing at least 8,000 square feet but less than 8,500 square feet – 32%; For lots containing at least 8,500 square feet but less than 9,000 square feet – 31%; For lots containing at least 9,000 square feet – 30%.*
- (e) The maximum height at any point of any building or structure shall not exceed 41 feet above the lower of original or finished grade.*
- (f) If all or a portion of a basement wall is exposed for the full height of the wall, dormers in the one-half story above the basement wall shall not be permitted.*
- (g) The maximum floor area ratio shall be as follows: for lots containing less than 12,000 square feet – .38; and for lots containing 12,000 or more square feet – .36.*
- (h) Attached garages shall have a minimum front yard setback of 25 feet. For corner lots the increased front yard setback of 25 feet is required along both frontage streets.*
- (i) Existing single or two-family structures non-conforming for front yard garage setback where demolition exceeds 50% of the building shell exclusive of demolition of a single story attached garage and for which the building permit for the existing structure was issued prior to June 1, 2017 may be altered, extended or structurally changed (but not reconstructed) to a front yard garage setback of 20 feet upon receipt of a special permit from the Board of Appeals under Section 7.5.2 of the Zoning By-Law provided: (1) the new construction meets all other requirements of the Zoning By-Law; (2) the garage structure is sited no closer to the front lot line than the farthest extent of the existing garage structure; and (3) the Board determines that such change, extension or alteration shall not be substantially more detrimental to the neighborhood than the existing nonconforming structure. Said special permit may be granted notwithstanding the provisions of Section 1.4.7.2. For the purposes of this footnote, the definition of “setback” in Section 1.3 of these Bylaws shall control.*
- (j) Existing single or two-family structures non-conforming for side yard setback where demolition exceeds 50% of the building shell exclusive of demolition of a single story attached garage and for which the building permit for the existing structure was issued prior to June 1, 2017 may be altered, extended or structurally changed (but not reconstructed) to a side yard setback of 10 feet upon a lot created by deed or plan endorsed or recorded prior to January 9, 1986 and to a side yard setback of 12.5 feet upon a lot created by deed or plan endorsed or recorded on or after January 9, 1986 upon receipt of a special permit from the Board of Appeals under Section 7.5.2 of the Zoning By-Law*

provided: (1) the new construction meets all other requirements of the Zoning By-Law; (2) the structure is sited no closer to the side lot line than the farthest extent of the existing structure; and (3) the Board determines that such change, extension or alteration shall not be substantially more detrimental to the neighborhood than the existing nonconforming structure. Said special permit may be granted notwithstanding the provisions of Section 1.4.7.2. For the purposes of this footnote, the definition of “setback” in Section 1.3 of these Bylaws shall control.

4.2.4 Table of Regulations for Public, Semi-Public and Institutional Uses in the Rural Residence Conservation, Single Residence A, Single Residence B and General Residence Districts and for the Institutional District

No building or structure for public, semi-public or institutional use, as listed in Section 3.2 Schedule of Use Regulations, shall be constructed, altered, or relocated on any lot except in conformance with these regulations:

District	Min. Lot Area (sf)	Min. Frontage (ft)	Front Setback (ft)	Side Setback (ft)	Rear Setback (ft)	Max. Floor Area Ratio (F.A.R.)	Max. % Lot Coverage	Max. Stories	Max. Height (ft)
Rural Residence Conservation	43,560	150	50	25	25	.30	15%	2-1/2 (g)	35
Single Residence A	43,560	150	35 (a)	25	25 (d)	.30	15%	2-1/2 (g)	35
Single Residence B	10,000	80	25 (b)	25 (c)	25 (d)	.30	15%	2-1/2 (g)	35
General Residence	10,000	80	25 (b)	25 (c)	25 (d)	.30 (h)	15% (i)	2-1/2 (g)	35
Institutional	43,560	150	30	25 (e)	15	NR	15%	2-1/2 (f)	35 (f)

The terms used in the Table of Regulations above are as defined in Section 1.3 of the By-Laws.

The symbol “NR” means no requirements.

- (a) *The setback area shall be kept open and landscaped with grass or other plant materials; such area shall be unpaved except for walks and driveways. The Board of Appeals may grant a special permit reducing the minimum front yard setback required by this footnote to no less than thirty (30) feet. (See Section 4.2.14)*
- (b) *The setback area shall be kept open and landscaped with grass or other plant materials; such area shall be unpaved except for walks and driveways. The Board of Appeals may grant a special permit reducing the minimum front yard setback required by this footnote to no less than twenty (20) feet. (See Section 4.2.14)*
- (c) *The Board of Appeals may grant a special permit reducing the minimum side yard setback required by this footnote to no less than twenty (20) feet. (See Section 4.2.14)*
- (d) *The Board of Appeals may grant a special permit reducing the minimum rear yard setback required by this footnote in a Single Residence A District to no less than fifteen (15) feet and the minimum rear yard setback required by this footnote in Single Residence B and General Residence Districts to no less than ten (10) feet. (See Section 4.2.14)*
- (e) *Buildings or structures on lots created by deed or plan, endorsed or recorded before January 9, 1986, shall have a minimum side line setback of 15 feet in the Institutional Districts.*
- (f) *Buildings and structures located in an Institutional District devoted to educational uses and uses accessory thereto and located at least 800 feet from any public way in the Town of Needham in existence as of September 1, 1998, shall have a maximum height in accordance with the following limitation:*

<u>Roof Type</u>	<u>Average Height (feet)</u>	<u>Maximum Height at any single point (feet)</u>
Flat Roof	63*	68*
Sloping Roof Top of Roof	85	90
Wall, cornice or eave line	63*	68*
Gabled endwalls	63*	68*

There shall be no limit on the number of stories of such buildings. The foregoing limitations are not intended to supersede any of the requirements of the Massachusetts State Building Code.

**The Board of Appeals may grant a Special Permit to allow the average height of a structure to increase as much as an additional seven (7) feet above the average height listed.*

(g) *See the definition of Half-story, under Story in the Definitions section.*

(h) *The Board of Appeals may grant a special permit increasing the maximum Floor Area Ratio required by this footnote up to 0.60 for a municipal building or structure on a lot containing an acre or more of area.*

- (i) *The Board of Appeals may grant a special permit increasing the maximum lot coverage required by this footnote up to twenty-five (25) percent for a municipal building or structure on a lot containing an acre or more of area.*

4.2.5 Build Factor Formula

In order to limit the degree to which a lot may have an irregular shape, the following **build factor formula** shall be used:

$$\frac{\text{Lot Perimeter Squared}}{\text{Actual Lot Area}} \text{ Divided By } \frac{\text{Actual Lot Area}}{\text{Required Lot Area}}$$

Lots recorded or endorsed after August 22, 1985 shall be subject to a maximum Build Factor of 20 in Single Residence B and General Residence Districts and 30 in Single Residence A and Institutional Districts. Lots recorded or endorsed prior to August 22, 1985 may not be modified such that the Build Factor of the modified lot exceeds 20 in SRB and General Residence Districts or 30 in SRA and Institutional Districts. Lots recorded or endorsed after February 16, 1995 shall be subject to a maximum Build Factor of 30 in a Rural Residence Conservation District. Lots recorded or endorsed prior to February 16, 1995 may not be modified such that the Build Factor of the modified lot exceeds 30 in a Rural Residence Conservation District.

4.2.6 Lot Area Calculation

No portion of a lot which is covered by a water body shall be counted in calculating the area of a lot for purposes of determining the respective minimum lot areas as listed in the Tables 4.2.1, 4.2.2, 4.2.3, and 4.2.4 above. Not more than a combined total of thirty (30) percent of: (a) land located in a Flood Plain District; (b) land area subject to the Wetlands Protection Act and the Inlands Wetlands Act, M.G.L., Ch. 131, S. 40 and 40A (but not including any area defined as a buffer area under said statutes); and (c) land subject to federal flood storage restrictions included within the Charles River Valley Storage Project shall be counted in calculating the area of a lot for purposes of determining the respective minimum lot areas in Single Residence A, Single Residence B, General Residence and Institutional Districts. The provisions of the second sentence of this paragraph (a) shall apply in Single Residence A, Single Residence B and General Residence Districts to any lot created after May 8, 1989.

Not more than a combined total of ten (10) percent of: (a) land located in a Flood Plain District; (b) land areas subject to the Wetlands Protection Act and the Inland Wetlands Act, M.G.L., Ch. 131, S. 40 and 40A (but not including any area defined as a buffer area under said statutes); and (c) land subject to federal flood storage restrictions included within the Charles River Valley

Storage Project shall be counted in calculating the area of a lot for purposes of determining the minimum lot area in a Rural Residence-Conservation District as listed in the Tables 4.2.1, 4.2.2, 4.2.3, and 4.2.4 above.

4.2.7 Special Regulations for Rural Residence – Conservation District

- (a) Lot Coverage No building or structure, or addition to any building or structure, but not including accessory buildings or structures, shall be erected or placed on a lot which will result in the covering by buildings or structures of more than fifteen percent (15%) of the lot area in a Rural Residence-Conservation District.
- (b) Vegetative Buffer In a Rural Residence-Conservation District, the first thirty-five (35) feet of the required minimum front setback of fifty (50) feet, as measured from Chestnut Street and from the designated Scenic Roads of South Street and Charles River Street, shall remain as a natural vegetative buffer not to be cut or cleared except for normal maintenance and vehicular access, including private driveways and subdivision roadways.”

4.2.8 Height Limitation Exceptions

The maximum height regulation in Section 4.2.4 shall not apply to schools and municipal buildings which may contain three (3) stories or may be as high as forty-five (45) feet. In the case of schools and other municipal buildings, structures erected on a building and not used for human occupancy, such as chimneys, heating-ventilating or air-conditioning equipment, mechanical equipment, mechanical flues or exhausts, elevator housings or equipment, generators, roof access, stairway enclosures, skylights, and the like may exceed the maximum building height provided that no part of such structure or equipment shall project more than 15 feet above the maximum allowable building height and the total horizontal coverage of all of such structures or projections on the building does not exceed thirty-three percent (33%) of the total roof area of the building. Notwithstanding the above height limitations, cornices and parapets may exceed the maximum building height provided they do not extend more than 5 feet above the highest point of the roof.

Notwithstanding the foregoing paragraph, a municipal building or structure located on a lot in excess of twenty (20) acres created by deed or plan, endorsed or recorded before September 1, 2012, may be as high as fifty (50) feet, provided the building or structure contains no more than one story, is used primarily for storage purposes and is located at least two hundred (200) feet from all property lines. Any municipal building which ceases to be a municipal building, because of a change of use or ownership, may continue to be used, maintained and reconstructed so as to contain up to the number of stories and the height which existed at the time of the change to non-municipal use or ownership. Notwithstanding the above, nothing contained herein shall in anyway limit the rights conferred under footnote (f) of Section 4.2.4 Table of Regulations for Public, Semi-Public and Institutional Uses in the Rural Residence Conservation, Single Residence A, Single Residence B and General Residence Districts and for the Institutional District.

In the case of schools or other buildings devoted to educational purposes and located in an Institutional District, including dormitories and accessory buildings, projections above a roof for housing elevator machinery, chimneys, ventilators, and mechanical flues or exhausts will not be subject to the heights limitations in Section 4.2.4, footnote (f) or this Section 4.2.8. Such projections shall not occupy an aggregate area of the roof exceeding thirty-three percent (33%) of the total ground coverage of the building and no housing for elevator machinery or mechanical equipment (other than chimneys, ventilators and mechanical flues or exhausts), or the equipment itself, shall extend more than fifteen (15) feet above the main roof elevation. At no point shall any such projection exceed 90 feet above grade. The Board of Appeals shall have the authority to grant a Special Permit to permit a height of twenty-five (25) feet above the main elevation over an area of the roof not exceeding twenty percent (20%) of the total ground coverage of the building, to a maximum height at any point of ninety (90) feet above grade. The remaining thirteen percent (13%) of the area of the roof where such projections are allowed shall extend no more than fifteen feet above the main roof elevation.

The Board of Appeals may grant a special permit authorizing the construction of radio and television antennae and antennae towers provided they are accessory to the principal permitted use and do not exceed fifty-five (55) feet in height. Neither the provisions of the previous sentence nor the maximum height regulations contained in Sections 4.2.1, 4.2.2, 4.2.3 and 4.2.4 shall apply to radio and television antennae and antennae towers that are accessory to a lawful residential use and fifty-five (55) feet or less in height; the Board of Appeals may grant a special permit authorizing construction of radio and television antennae and antennae towers higher than fifty-five (55) feet, provided they are accessory to a lawful residential use.

Towers, steeples, spires or domes of religious or government buildings or educational buildings located in an Institutional District are not limited by the maximum height regulations contained in this Section or in Section 4.2.4.

4.2.9 Minimum Side and Rear Line Setbacks: Accessory Structures

No accessory building or structure, excepting fences, shall be constructed, altered or relocated so that any part thereof shall be less than ten (10) feet from any other building or structure or less than five (5) feet from the side or rear lines of the lot on which such building or structure is located. Notwithstanding the foregoing five (5) foot setback from the rear or side lines of the lot, any accessory building or structure which exceeds fifteen (15) feet in height must comply with the underlying district's rear and/or side setback requirements. Notwithstanding the foregoing, an accessory pergola need not comply with the requirements of the preceding sentences but said pergola must comply with all dimensional setback requirements from abutting properties and from streets and ways, and said pergola shall not be constructed or placed in a position where it would prevent the use of a designated fire lane or reduce access to any building. For purposes of this paragraph, "pergola" means an open frame structure consisting of colonnades or posts with a latticework roof designed to support climbing plants, either standing alone or attached to another building or structure. Notwithstanding the foregoing, an accessory building or structure associated with a pool use which is less than eleven (11) feet in height and has less than one-hundred (100) square feet of ground coverage need not comply with the foregoing ten (10) foot distance from any

other building or structure requirement as said requirement pertains to the placement of the accessory building or structure from the edge of the pool, provided that such accessory building or structure is placed no less than eight (8) feet from the edge of the pool.

4.2.10 Flexible Development Consistent with the Subdivision Control Law

- (a) **General** -- The intent of Section 4.2.10 is to facilitate sensitive use of Town resources through allowing flexibility in meeting the basic objectives of the intensity of use requirements of Sections 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.2.6, 4.2.7, 4.2.8 and 4.2.9. These provisions shall apply in all Single Residence, General Residence, Rural Residence Conservation, and Institutional Districts.
- (b) **Dimensional Requirements** -- Notwithstanding the provisions of Sections 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.2.6, and 4.2.7, the Planning Board may by special permit and in accordance with the Subdivision Control Law authorize the division of a parcel into lots to be governed by the following alternative frontage and lot area regulations rather than those otherwise applicable, provided that the parcel being divided has an area of at least four (4) times the minimum lot area requirement in that district.
 - (1) **Number of Lots.** The number of building lots allowed on any parcel shall be the number of lots into which the parcel could be divided and built upon under the normally applicable dimensional and waste disposal regulations. That number may, at the owner's option, be determined prior to application by the Building Commissioner following consultation with the Planning Board, or by an alternative "conventional" plan certified to comply with normal applicable regulations by both a Registered Land Surveyor and a Professional Engineer. In addition, any number of non-building lots reserved for open space or recreation may be created.
 - (2) **Lot Frontage.** Except on existing streets, the minimum frontage for any building lot shall be $\frac{2}{3}$ the normally applicable minimum lot frontage. If the building lot width at the building line exceeds $\frac{2}{3}$ of the normally applicable minimum lot frontage, the frontage may be further reduced to 40 feet. The frontage for any building lots having frontage only on an existing street shall be not less than the normal frontage requirement.
 - (3) **Lot Area.** The area of any individual building lot created shall be at least 70% of the normally applicable minimum lot area requirement.
 - (4) **Setback.** A setback shall be provided along all boundaries of the development except along streets where the front setback requirements of Sections 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.2.6, and 4.2.7 shall apply. Within the setback, no structure shall be erected and vision obscuring vegetation shall be preserved or planted. The depth of the setback when Sections 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.2.6, and 4.2.7 do not apply shall be 20 feet.
- (c) **Special Permit Consideration.** A special permit for flexible development shall be granted only if the Planning Board determines the following:

- (1) Such alternative development better serves By-Law purposes than would development under otherwise applicable requirements.
 - (2) Traffic circulation and safety would be improved through a reduction in length of streets or creation of fewer or better located or designed driveways and street egresses from the development onto existing streets.
 - (3) Visual intrusion would be reduced by preserving some visual buffering between proposed dwellings and previously existing streets.
 - (4) At least one of the following three amenities will be provided:
 - protecting natural features by reducing the volume of cut and fill for roads and construction sites or the area of vegetation displaced or disturbed, or the area of environmentally sensitive lands disturbed by construction, or
 - maintaining water quality within Aquifer Protection Districts by reducing the number of on-site disposal systems or the amount of impermeable surfaces within the development, or
 - serving recreation and conservation needs by reserving common land in a condition appropriate to meet those needs.
- (d) **Documentation.** All lots created under the provisions of Section 4.2.10 Flexible Development shall be shown on a recorded plan, indicating that Section 4.2.10 applies, and that no additional building lots are to be created through future land division of such lots. A restriction enforceable by the Town shall be recorded at the Registry of Deeds ensuring both the Town and the developer that no additional building lots shall be created and that areas designated for open space or recreational use are to be retained in that use.
- (e) **Design Review.** At the time of filing an application for Flexible Development, the applicant shall also file an application and materials for design review in accordance with the procedures described in Subsection 7.7.3 of Section 7.7 Design Review.

4.2.11 Planned Residential Development (PRD)

4.2.11.1 Purpose

To provide an alternative at density levels established by this By-Law to conventional development patterns which foster innovative site planning based on the natural characteristics of the land; to encourage the preservation of significant open space for conservation and recreation; to facilitate the economic and efficient provision of public utilities and services; to promote aesthetic and other amenities; and to insure development which is harmonious and compatible to the surrounding neighborhoods.

4.2.11.2 Standards

- (a) **Minimum Tract Size** – Planned Residential Development (PRD) shall be permitted on a tract of land in the Rural Residence-Conservation, Single Residence A and Single Residence B Districts having an area not less than 10 times the minimum lot area of the zoning district within which it is located and shall have frontage of at least 50 feet on a way.
- (b) **Number of Dwelling Units** – The number of dwelling units shall be determined by one of the two following methods:
 - (1) The Net Usable Land Area within the tract divided by the minimum lot area requirement for the zoning district in which the tract is located. Net Usable Land Area shall equal 85% of the gross tract area minus 100% of all water bodies minus 70% of land located in a Flood Plain District minus 70% of the land subject to M.G.L. Ch. 131, S.40 and 40A and to federal flood storage restrictions included within the Charles River Valley Storage project.
 - (2) Submission of a “conventional” subdivision plan certified to comply with normal applicable regulations by both a Registered Land Surveyor and a Professional Engineer. In this case the number of dwelling units shall equal the number of legal building lots created.
- (c) **Open Space** – No less than 40% of the PRD tract shall be designated as open space and shall not be covered with buildings, roads, driveways, parking areas or service areas, yards, exclusive use areas, patios, and gardens for the residents. Open space shall be available and reasonably accessible to each dwelling unit. No more than 50% of the open space shall be wetland or other land subject to seasonal or periodic flooding unless a greater percentage is specifically authorized by the Planning Board. Land designated as open space shall have a shape, dimension, character, and location suitable to assure its use for park, recreation, conservation, or agricultural purposes by at least all the residents of the PRD.

Provisions shall be made for the open space to be owned:

- (1) In common by the owners of all units in the PRD; or
- (2) by a trust or association of the owners of all units in the PRD; or
- (3) by the Town; or
- (4) otherwise as may be authorized by the Planning Board.

In all cases a perpetual restriction running to or enforceable by the Town shall be recorded in respect to such open space land. Such restriction shall provide that the open space shall be retained in perpetuity for one or more of the following uses: conservation, agriculture, recreation or park. Such restrictions shall be in a form or substance approved by the Planning Board.

- (d) **Permitted Uses** – Single-family detached and attached structures without regard to form of ownership provided no more than 50% of such structures shall be attached and accessory uses incidental to the principal uses.
- (e) **Structure Location** – the location, size, and shape of any structures to be constructed shall be appropriate to the terrain in which they are located and shall not be detrimental to the neighborhood and shall not adversely affect the character of the neighborhood. Structures with attached dwelling units shall contain no more than four units.
- (f) **Height** – The maximum permitted height of any structure in a PRD shall be 35 feet or 2-1/2 stories.
- (g) **Area, Frontage and Setback Requirements** – There shall be a minimum lot area in the case of a subdivision or exclusive use area (an area located adjacent to a dwelling unit and reserved for its exclusive use) in all other cases of 10,000 square feet in the RRC and SRA Districts and 5,000 square feet in the SRB District. Each lot or exclusive use area shall have frontage of at least 50 feet on a paved way or driveway. No structure shall be within 30 feet of another structure other than in the case of attached dwelling units. No building shall be erected within 30 feet of a way on which the PRD tract has frontage or 20 feet from the boundary line of the PRD tract.
- (h) **Parking** – There shall be an adequate arrangement and number of parking spaces in relation to the dwelling units constructed. No more than six (6) parking spaces shall be grouped together.
- (i) **Drainage and Sewage Disposal** – The PRD shall have adequate methods of sewage disposal and drainage. Said methods shall be subject to approval by the Public Works Department and/or the Board of Health.
- (j) **Ways, Interior Drives, and Utilities** – The construction of all ways, interior drives and utilities shall be in accordance with the standards specified in the Subdivision Regulations and Procedural Rules of the Planning Board and subject to the recommendations of the Public Works Department. In the event the applicant chooses not to subdivide the tract under the Subdivision Control Act, the Planning Board shall require nevertheless sufficient security to insure compliance with the installation of Ways, Interior Drives, and Utilities. Upon the written request of the applicant, the Planning Board may waive or modify the requirements of the Subdivision Rules and Regulations where it is demonstrated that such waiver or modification is consistent with the purpose of this section.
- (k) **Circulation** – The PRD shall provide for the convenience and safety of vehicular and pedestrian movement on the site and for adequate location of driveways in relation to street traffic. Said circulation shall be reviewed by the Fire Department for access by safety vehicles.

- (l) **Prohibition of Future Development** – No tract, lot, or exclusive use area for which a special permit is granted under this section shall be further subdivided and such notation shall be shown on the plan.

4.2.11.3 Procedure

- (a) **Pre-application Review** – To promote better communication and to avoid misunderstanding, the applicant is encouraged, prior to the preparation of a formal application, to meet with the Planning Board and Planning Director for general discussion relative to the site, proposed PRD plan and other issues relative to the proposed project.
- (b) **Application** – The applicant shall submit a completed application form and 7 copies; and a project narrative which shall describe the development concept including in tabular form the number of units, type, size (number of bedrooms, floor area), ground coverage, parking spaces and area, and total ground coverage. Additionally, accompanying the application shall be a filing fee and a set of original development plans and ten (10) copies consisting of:
 - (1) Site plans – meeting, to the extent possible, the requirements set forth for a Definitive Plan in the Subdivision Regulations and Procedural Rules of the Planning Board;
 - (2) Elevations;
 - (3) Typical floor plan;
 - (4) Detailed plans of all entrances to the PRD tract;
 - (5) Detailed plans for disposal of sanitary sewage;
 - (6) Landscape plan;
 - (7) Details of landscape treatment at boundaries of the PRD tract and banks or waterways;
 - (8) Proposed deed restrictions; and
 - (9) Additional information as required by the Planning Board.

At the same time application materials shall be submitted to the Design Review Board, along with an application for design review, in accordance with the procedures described in Subsection 7.7.3 of Section 7.7, Design Review.

- (c) **Referral** – Upon receipt of an application, the Planning Board shall transmit a set of application materials to the Department of Public Works, Town Engineer, Fire Department, Board of Health (if on-site sewage disposal is proposed) and to any other Town agency as deemed appropriate. Within thirty-five (35) days of receipt of said application materials,

each of the Town agencies named above shall review and recommend in writing to the Planning Board regarding the proposed PRD; failure of any such town agency to submit a written report with recommendation within said thirty-five (35) day period shall be deemed lack of opposition thereto.

A preliminary design review report from the Design Review Board, as described in Section 7.7, shall satisfy the above referral requirement, if submitted to the Planning Board within the 35-day period. In addition, the Design Review Board shall also submit a final design review report within seventy-five (75) days of the date of its having received an application for design review related to a Planned Residential Development.

- (d) **Planning Board Review** – a special permit shall be issued by the Planning Board acting as the Special Permit Granting Authority under this Section only if the Planning Board finds that the PRD is in harmony with the purpose of this section and the Planning Board finds the PRD to be sufficiently advantageous to the town and to the residential district in which it is located. In issuing a special permit, the Planning Board may impose such conditions and safeguards as public safety, welfare and convenience may require. Other than the case of a subdivision, copies of all recorded instruments shall be filed with the Planning Board prior to the issuance of a building permit.

4.2.12 Residential Compound

- (a) **Purpose** – To provide limited residential development within large tracts of land in a manner which minimizes Town maintenance, responsibility and cost, and simultaneously preserves the existing character of the Town.
- (b) **Standards** – A group of not more than five single-family dwellings sharing common frontage and private access road may be permitted by Special Permit by the Planning Board in all single-family residential districts subject to the following provisions:
 - (1) **Tract Frontage** – A Residential Compound may be permitted on a single tract of land in one ownership, having a minimum frontage on a way of 150 feet in the RRC and SRA Districts and 80 feet in the SRB District.
 - (2) **Density** – A Residential Compound shall contain at least two acres per dwelling unit in the RRC and SRA Districts and 20,000 square feet per dwelling unit in the SRB District. Land which, at the time of submission of an application under this section, is subject to a perpetual restriction of the type described in M.G.L. Ch. 184, S.31 or any restriction similar thereto, shall not be included in the minimum tract size.
 - (3) **Dimensional Requirements** – No structure shall be closer than 30 feet from any other structure or way and 20 feet from any tract boundary line. No building lot within the Residential Compound shall be reduced in size below the minimum lot area required for the district in which it is located.

(4) **Access** – Each building lot in the Residential Compound shall have adequate and legally enforceable rights of access to a way via a private street or driveway.

(5) **Open Space** – Any land within the Residential Compound, not designated as a building lot, private road or driveway shall be designated as permanent open space. Such land shall have a shape, dimension, character and location suitable for conservation, outdoor recreational facilities of a non-commercial nature, agricultural, preservation of scenic or historic structures, and structures accessory to any of the above uses (including swimming pools, tennis courts, stables, greenhouses). Provisions shall be made for the open space to be owned:

- i. in common by owners of all units in the Residential Compound; or
- ii. by a trust or association of the owners of all units in the Residential Compound; or
- iii. by the Town; or
- iv. by the Needham Conservation Commission; or
- v. otherwise as may be authorized by the Planning Board.

In all cases a perpetual restriction running to or enforceable by the Town shall be recorded in respect to such open land. Such restriction shall provide that the Open Space shall be retained in perpetuity for one or more of the following uses: conservation, agriculture, recreation, or park. Such restriction shall be in a form or substance approved by the Planning Board.

- (c) **Limitation on Subdivision** – No Residential Compound for which a special permit has been issued under this Section may be subdivided or further developed and a notation to this effect shall be shown on the plan.
- (d) **Other Restrictions** – The approved plan of the Residential Compound shall contain statements indicating the following: that the land lies within an approved Residential Compound; that development of the land is permitted only in accordance with the land uses indicated thereon; that the town will not be requested to accept or maintain the private access, drainage, open space or any other improvements within the Compound. Further, all deed restrictions with respect to ownership, use and maintenance of permanent open space shall be referenced on, and recorded with, the plan.
- (e) **Procedure for Approval** – The applicant shall submit to the Planning Board a completed application form, a filing fee, and an original and 10 copies of development plans showing the following:
 - (1) Site Plans – meeting to the extent applicable the requirements set forth in a Definitive Plan in the Subdivision Regulations and Procedural Rules of the Planning Board and including proposed locations of all structures.

- (2) Detailed plans of all entrances from the public street;
 - (3) Detailed plans of disposal of sanitary sewage;
 - (4) Landscape plan;
 - (5) Proposed deed restrictions;
 - (6) Additional information as required by the Planning Board.
- (f) **Referral** – Upon receipt of an application, the Planning Board shall transmit a set of application materials to the Department of Public Works, Town Engineer, Fire Department, Board of Health (if on-site sewage disposal is proposed) and to any other Town agency as deemed appropriate. Within thirty-five (35) days of receipt of said application materials, each of the Town agencies named above shall review and recommend in writing to the Planning Board regarding the proposed Residential Compound; failure of any such agency to submit a written report with recommendations within said thirty-five (35) dy period shall be deemed lack of opposition thereto.
- (g) **Planning Board Review** – A special permit shall be issued by the Planning Board acting as the Special Permit Granting Authority under this section only if the Planning Board shall find that the Residential Compound is in harmony with the general purpose and intent of this section and that it is designed in such a manner to make it sufficiently advantageous to the town and to the residential district(s) in which the Residential Compound is located. If a special permit is granted, the Planning Board shall impose as a condition of approval that copies of all recorded instruments be filed with the Planning Board prior to the issuance of any building permit.
- (h) **Compliance with the Subdivision Control Law** – The Planning Board approval of a special permit hereunder shall not substitute for compliance with the Subdivision Control Law nor oblige the Planning Board to approve a related Definitive Plan for subdivision, nor reduce any time periods for Board consideration under that Law. However, in order to facilitate processing, the Planning Board may, insofar as practical under law, adopt regulations establishing procedures for submission of a combined Special Permit Application/Subdivision Plan which shall satisfy the Board’s regulations under the Subdivision Control Law. Except where the Residential Compound does not constitute a subdivision under the Subdivision Control Law, a Definitive Plan shall be submitted to the Planning Board consistent with their Subdivision Regulations and in substantial conformity with the approved Development Plan.

4.2.13 Reductions in Dimensional Regulations by Special Permit

In Single Residence A, Single Residence B and General Residence Districts, the minimum front setback and the minimum side and rear line setback requirements for a building or structure devoted

to a public, semi-public or institutional use, as listed in Section 3.2 Schedule of Use Regulations, may be reduced by special permit granted by the Board of Appeals in accordance with Section 4.2.4. In acting upon such applications for such reductions, the Board shall consider the following, in addition to the criteria for special permits generally (Section 7.5.2):

- (a) Whether, and by how much, building scale will exceed nearby structures,
- (b) whether, and by how much, shadowing on abutting land or streets will be increased, or privacy will be diminished,
- (c) whether any resulting building prominence is appropriate, in light of the functional or symbolic role of the structure,
- (d) whether there are fire protection concerns created by the reduction,
- (e) whether the requested reduction is necessary for the proposal to proceed, and
- (f) what the community benefits are from the proposal, including consideration of taxes, employment, and service.

4.2.14 Screening for Public, Semi-Public and Institutional Uses

4.2.14.1 Transition Areas

Where a building or structure devoted to a public, semi-public or institutional use, as listed in Section 3.2 Schedule of Use Regulations, is to be placed within a Rural Residence-Conservation, Single Residence A, Single Residence B or General Residence District, a landscaped transition and screening area shall be provided along those segments of the lot lines necessary to screen the public, semi-public or institutional use from buildings located on abutting lots. The transition area shall be at least twenty-five (25) feet wide, as measured at its narrowest point, and shall be suitably landscaped as specified at Section 4.2.14.3. The transition area may be provided within the minimum yard required for a building.

4.2.14.2 Use of Transition Areas

Only necessary driveways or interior drives shall be located across a required transition area. No building, structure, parking area, play area or interior street may be located in this transition area. A transition area may be used for passive recreation; it may contain pedestrian, bike or equestrian trails, provided they do not reduce the effectiveness of the transition area as a year-round visual screen. No other uses are permitted in a transition area.

4.2.14.3 Transition Area Standards and Requirements

The following standards shall apply to the installation and maintenance of all landscaping, transition and screening areas required by this section:

- (a) **Composition of Landscaping, Transition and Screening Areas** – A landscaped transition and screening area shall consist of a landscaped strip and may include fences, walls or berms which shall serve to provide an effective year round visual screen at the time of installation.
- (b) **Height of Screening** – Visual screening comprised of a mixed planting of deciduous and coniferous trees and shrubs and walls or fences shall have a minimum overall height of six feet at the time of installation.
- (c) **Type of Plant Materials** – A variety of plant material shall be selected to provide an effective visual screen, to be maintained at a minimum height of six feet. Plantings shall be a mixture of deciduous and coniferous trees and shrubs for the screening to maintain its effectiveness throughout the winter months. Ground cover, grass, mulch or other equivalent landscape treatment, shall be provided in all landscaped transition and screening areas. Where existing vegetation is used as the required planting, no ground cover, grass, mulch or equivalent treatment shall be required, provided all man-made debris has been removed from within the transition area.
- (d) **Size of Plant Materials** – All trees required by this section shall have a minimum caliper of three inches at the time of planting.
- (e) **Maintenance** – The owner of the lot shall be responsible for the maintenance, repair and replacement of all landscaping materials installed in accordance with this section. All plant material shall be maintained in a healthy growing condition, replaced when necessary and kept free of debris. After the initial planting, all plant materials not surviving after the first winter and through the following growing season shall be replaced in kind.

4.2.14.4 Exceptions, Special Permits

Where, due to the size, shape or topography of a lot, the strict provisions of this section would reduce the usable area of a lot so as to preclude a reasonable use of the lot, the Board of Appeals may grant a special permit to modify the transition area requirements where the side of a building, a barrier and/or the land between the building and lot line has been specifically designed, through a combination of architectural and landscaping techniques, to minimize potential adverse impacts on abutting lots. The application for a special permit must demonstrate, in detail, the problems imposed by these requirements and provide an effective alternative. Any modification of the required transition areas may be made subject to such conditions as are determined by the Board of Appeals to assure adequate screening and buffering between particular uses. In determining what, if any conditions are necessary, the Board of Appeals shall consider:

- (a) the proximity to a residential development;

- (b) the topography of the site and of adjacent property;
- (c) the nature of the use and/or activity on the site;
- (d) the land use of adjacent property;
- (e) the width and use of all abutting public rights-of-way; and
- (f) the potential for impact of any nuisance activities such as noise, light or glare.

4.3 Dimensional Regulations for Apartment Districts

4.3.1 Table of Regulations

No apartment or multi-family building or group of buildings shall be constructed, altered or relocated on any lot except in conformance with these regulations:

	Min. Lot Area (sf)	Min. Frontage (ft)	Max. Dwelling Units (Per Acre)**	Max. FAR	Min. Setbacks (ft) Front/Side/Rear	Max. Height* (ft)
A-1	20,000	120	18	0.5	25/20/20	3 Stories–40
A-2	43,560	150	8	0.3	40/40/40	3 Stories–40
A-3	43,560	150	4	0.3	40/40/40	2-1/2 Stories–35

* No more than three (3) floors to be used for human occupancy. See height limitation exceptions in Section 4.7.2. Provided further, however, in the Apartment-2 Zoning District, there shall be a maximum of 4 stories, a maximum height of 50 feet, and four (4) floors may be used for human occupancy, if (i) the structure or portion of the structure that is four stories and permitted to be used for human occupancy is utilized as a convalescent or nursing home and uses that are supportive and/or accessory to such convalescent or nursing home, and (ii) the height of the structure that exceeds 40 feet is utilized as a convalescent or nursing home and supportive and/or accessory uses thereto provided further that the maximum square footage of the structure or structures benefitting from the provisions of this section shall be limited to 110,000 square feet. If a structure contains two or more uses, then only that portion of the structure that is utilized as a convalescent or nursing home, and supportive and/or accessory uses thereto, can reach a maximum height of 50 feet.

** The total area used in calculating density shall exclude 100% of all water bodies; 70% of land located in a Flood Plain District; and 70% of land subject to M.G.L., Ch. 131, S. 40 and S. 40A, and to federal flood storage restrictions included within the Charles River Valley Storage Project.

4.3.2 Driveway Openings

- (a) In that portion of a lot between an apartment house or houses and the exterior line of any way upon which the lot abuts, there may be opened not more than two (2) driveway openings onto each such way. Said driveway openings shall not exceed twenty-five (25) feet in width and shall not be less than 150 feet from another such opening or within 50 feet of each other if the driveway openings do not exceed fifteen (15) feet in width. In no event shall a driveway opening be within fifty (50) feet from the sideline of an intersecting way. When there are

two (2) driveways of varying widths, the required distance between them will be governed by the driveway with the greatest width.

(b) In order to preserve the residential character of the Town, an additional driveway opening may be provided if the following conditions are met:

- (1) The lot area shall have a minimum of two acres:
- (2) Such additional openings shall not exceed fifteen (15) feet in width, with the distance between to be recommended by the Planning Board through its Site Plan Review, as per Section 7.4 of this By-Law;
- (3) Such additional openings shall not serve more than four (4) parking spaces, including garages;
- (4) The total number of openings on any given way shall not exceed the quotient of the total lot frontage on such way divided by 1-3/4 of the required lot frontage in that density zone.

4.3.3 Open Space

Except for driveways and walks, the front setback area shall be kept open and in lawn or landscaped, unparked on and unbuilt upon. The area between a lot line and a line five (5) feet from and parallel thereto shall be kept open and in lawn or landscape, unparked on and unbuilt upon.

4.3.4 Building Location

No part of a building or structure shall be located less than twenty (20) feet from any part of any other building or structure on the same lot, provided, however, that (a) any apartment house or other building used for dwelling purposes and permitted in that apartment district may be connected by a covered walkway, corridor, or breeze way to (i) any other apartment house or other such building on the same lot or (ii) any garage on the same lot permitted as an accessory use to the building to which it is so connected, and (b) at least seventy-five (75) percent of the perimeter of each building so connected to another building be accessible.

4.3.5 Setbacks for Other Uses

Front, side, and rear line setbacks for any permitted building or structure, other than an apartment house (or a structure accessory thereto), shall be the same as required in Sections 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.2.5, 4.2.6, 4.2.7 and 4.7.1 and 4.7.3.

4.4 Dimensional Requirements for Commercial Districts

The following regulations shall apply to Business, Chestnut Street Business, Center Business, Avery Square Business, Hillside Avenue Business, and Neighborhood Business districts.

4.4.1 Minimum Lot Area and Frontage

Minimum Lot Area

10,000 Sq. Ft.

Minimum Frontage

80 Feet

4.4.2 Maximum Building Bulk

- (a) In a Business District, no building or structure shall be constructed, reconstructed, extended, enlarged or arranged so that it covers more than the percentage of the total lot area as specified in Table 1. No lot or building or structure thereon shall be changed in size as to violate these provisions.

TABLE 1

USES		LOT TYPE	1 Story	2 Story	3 Story
Auditorium,	)				
Theaters,	)				
Bowling Alleys,	)	Interior	25%	N/A	N/A
Skating Rinks,	)	Corner	35%	N/A	N/A
Places of Assembly	)				
Billiard Rooms,	)				
Private Clubs,	)				
Restaurants and	)	Interior	40%	25%	25%
Other Food	)	Corner	50%	35%	35%
Establishments	)				
Funeral Parlors	)				
Other Uses	)				
Permitted in Business	)	Interior	40%	35%	25%
Districts	)	Corner	50%	45%	35%
N/A – not applicable					

- (b) Buildings and structures which are located on property in the Center Business District are not limited to the maximum lot coverage requirements of this Section 4.4.2 as specified in Table 1, but shall have a maximum floor area ratio of 1.0 or the floor area ratio in existence on January 1, 1990, whichever is greater. (See also Section 4.4.5, third paragraph, second sentence.) Notwithstanding the foregoing to the contrary and subject to all other requirements of the district, the Planning Board acting as a special permit granting authority may issue a special permit in the Center Business District that exempts the floor area of an underground parking garage and the floor area of the underground portion of a building devoted in whole or in part to the parking of automobiles from being counted as floor area for purposes of determining maximum floor area ratio.
- (c) Buildings and structures which are located on property in the Chestnut Street Business District are not limited to the maximum lot coverage requirements of this Section 4.4.2 as specified in Table 1, but shall have a maximum floor area ratio of 0.7. Notwithstanding the foregoing to the contrary and subject to all other requirements of the district, the Planning Board acting as a special permit granting authority may issue a special permit in the Chestnut Street Business District that exempts the floor area of an underground parking garage and the floor area of the underground portion of a building devoted in whole or in part to the parking of automobiles from being counted as floor area for purposes of determining maximum floor area ratio.
- (d) Buildings and structures which are located on property in the Neighborhood Business District are not limited to the maximum lot coverage requirements of this Section 4.4.2 as specified in Table 1, but shall have a maximum floor area ratio of 0.5.
- (e) In other Commercial Districts (ASB, HAB) there is no limitation on lot coverage, but buildings shall not be constructed, reconstructed, extended, enlarged or arranged so that the following floor area ratios are exceeded. The limits for mixed uses on the same premises shall be interpolated between the limits below in proportion to their floor areas.
 - (1) For eating establishments, or any use providing service to patrons while in autos, or any use having gas pumps the maximum floor area ratio shall be 0.35.
 - (2) For all other uses in these districts the maximum floor area ratio shall be 0.7.

Notwithstanding the foregoing to the contrary and subject to all other requirements of the district, the Planning Board acting as a special permit granting authority may issue a special permit in the Avery Square Business District and Hillside Avenue Business District that exempts the floor area of an underground parking garage and the floor area of the underground portion of a building devoted in whole or in part to the parking of automobiles from being counted as floor area for purposes of determining maximum floor area ratio.

4.4.3 Height Limitation

In a Business District, the limit of height of a building or structure shall be three (3) stories not to exceed forty (40) feet, provided that in no event shall any building contain more than three floors used for occupancy; in the Center Business District, the limit of height of a building or structure shall be two and one-half (2 ½) stories not to exceed thirty-five (35) feet, provided that in no event shall any building contain more than two floors used for non-residential occupancy other than storage, residential occupancy being permitted on the second floor and in the half-story directly above the second floor consistent with the use and density requirements of Section 3.2.2. Notwithstanding the foregoing story, height and occupancy limitations, and subject to all other requirements of the district, the Planning Board acting as a special permit granting authority may issue a special permit in the Center Business District to permit a municipal building of 3 stories, to permit an increase in the height of a municipal building to a height not to exceed fifty (50) feet and to permit four (4) floors of a municipal building to be used for non-residential occupancy. Such a special permit may be granted only after it is demonstrated by the applicant that: (i) the proposed increased building height and number of stories will not create a significant detrimental impact on existing buildings and uses in the vicinity; and (ii) the proposed building and its occupancy contributes to, and does not detract from, a pedestrian-friendly streetscape.

Notwithstanding the above, no building or structure which is located on property in the Avery Square Business, Hillside Avenue Business, or Neighborhood Business districts shall exceed two and one-half (2 ½) stories, including ground level covered or enclosed parking, no more than two (2) stories of which shall be occupied except for storage, nor shall the building or structure exceed a total height of thirty-five (35) feet.

Notwithstanding the above, in the Chestnut Street Business District, the limit of height of a building or structure shall be two and one-half (2 ½) stories not to exceed thirty-five (35) feet, including ground level covered or enclosed parking, provided that in no event shall any building contain more than two floors used for non-residential occupancy other than storage, residential occupancy being permitted on the second floor and in the half-story directly above the second floor consistent with the use and density requirements of Section 3.2.2.

4.4.4 Front Setback

In the Business District, there shall be a minimum front setback of ten (10) feet for all lots zoned in the Business District prior to April 14, 1952 and of twenty (20) feet for all lots changed to the Business District thereafter. The setback area shall be kept open and landscaped with grass or other plant materials; such area shall be unpaved except for walks and driveways, as defined in Section 4.4.5. Regulations relative to parking setbacks are governed by Section 5.1.

In the Chestnut Street Business District, there shall be a minimum front setback of ten (10) feet for all buildings except along both sides of Chestnut Street where there shall be a front setback of twenty (20) feet for all buildings. The landscaping treatment for the setback area shall be consistent with the Chestnut Street Landscape Design Recommendations (April 1988) on file in the office of the Planning

Board. No parking shall be allowed in this setback area. Parking shall be on the side or in the back of the building.

In the Center Business District, there shall be a front setback of three (3) feet or a setback consistent with the average of the setbacks of the two adjacent buildings, whichever is smaller.

In the Avery Square Business District, there shall be a front setback of not less than ten (10) feet, or a setback consistent with the setbacks for principal buildings existing on the premises as of the effective date of this provision, or the average of the setbacks of buildings on adjoining lots, whichever is less restrictive. Principal buildings in the Avery Square Business District shall have a front setback of not more than fifteen (15) feet on Highland Avenue, if having frontage upon it. In the Avery Square Business District, the setback, if any, shall be kept open and landscaped with grass or other plant materials and unpaved except for walks and driveways, as defined in Section 4.4.5.

In the Avery Square Overlay District, the front setback, if any, shall be kept open and landscaped with grass, plants, and other non-paving materials such as mulch, and shall be unpaved except for patios, walks, and driveways as defined in section 4.4.5. Walls (including walls serving in part as retaining walls) no higher than 36 inches above the grade of the patios, as well as fencing and privacy screening, along the front and side edges of the patios, shall be allowed in the Avery Square Overlay District.

In the Hillside Avenue Business District, there shall be a minimum front setback of twenty (20) feet. The setback shall be kept open and landscaped with grass or other plant materials and unpaved except for walks and driveways, as defined in Section 4.4.5.

In the Neighborhood Business District, there shall be a front setback of not less than twenty (20) feet, or a setback consistent with the setbacks for principal buildings existing on the premises as of the effective date of this provision, or the average of the setbacks of buildings on adjoining lots, whichever is less restrictive. The setback, if any, shall be kept open and landscaped with grass or other plant materials and unpaved except for walks and driveways, as defined in Section 4.4.5.

4.4.5 Driveway Openings

In the Business, Chestnut Street Business, Avery Square Business, Hillside Avenue Business, and Neighborhood Business districts, the following regulations shall apply. In that portion of a lot contained within the required front setback, there may be constructed not more than two (2) driveways for every one hundred fifty (150) feet or less of frontage on each way. Driveways shall be located so as to minimize conflict with traffic on streets and where good visibility and sight distances are available to observe approaching pedestrian and vehicular traffic. The width of a driveway for one-way traffic shall be a minimum of twelve (12) feet and a maximum of eighteen (18) feet, as measured at its narrowest point. The width of a driveway for two-way traffic shall be a minimum of eighteen (18) feet and a maximum of twenty-five (25) feet, as measured at its narrowest point.

In the Center Business District, where access to the rear of a parcel is available from a public way, private way, common driveway, alley way or parking area, no driveway requiring the crossing of a public sidewalk or that requires a new curb cut on Chestnut Street, Highland Avenue, Great Plain

Avenue or Chapel Street shall be allowed. This restriction shall not apply where the new curb cut provides a single driveway opening for two or more properties and constitutes merely the widening of an existing curb cut that already services one of the properties.

In the Center Business District, where access to the rear of a parcel is not available as described above, vehicular access for parking and loading areas shall be from shared or common access driveways, rather than from individual driveways at each parcel. In the Center Business District, the Planning Board acting as a special permit granting authority may issue a Special Permit that increases the maximum floor area ratio of a specified parcel to 1.2, where the use of a shared access or driveway eliminates the need for providing an individual driveway on that parcel.

In that portion of a lot contained within the required front setback, there may be constructed not more than one (1) driveway for every one hundred (100) feet or less of frontage on each way in the Center Business District. Driveways shall be located so as to minimize conflict with traffic on streets and where good visibility and sight distances are available to observe approaching pedestrian and vehicular traffic. Driveways shall be located a minimum of fifty (50) feet from the property line at the nearest street intersection in the Center Business District. The width of a driveway for one-way traffic shall be a minimum of twelve (12) feet and a maximum of eighteen (18) feet, except if the driveway opening services two or more properties in which case said driveway opening shall be a maximum of twenty-five (25) feet, all as measured at its narrowest point. A Special Permit granted by the Planning Board shall be required for one-way driveways over twelve (12) feet in width in the Center Business District. The width of a driveway for two-way traffic shall be a minimum of eighteen (18) feet and a maximum of twenty-five (25) feet, as measured at its narrowest point.

4.4.6 Enclosed Parking

Whenever off-street parking is provided underground and/or within a building itself, the maximum area coverage of the building may be increased up to the limits of the required setbacks as provided herein. The lot coverage of the building may be increased up to 2½% points above the maximum allowed percentage, by one square foot for each square foot of parking space (excluding driveways and aisles) that is underground and/or within the building itself.

Parking which is under a building or partially underground shall, except for driveways, be separated from the street line by building space occupied by the principal use, not by parking.

In the Center Business District, enclosed parking shall be entirely below the grade of adjoining streets measured at their respective center lines. Access to enclosed parking shall be from the rear of the building. If provided, enclosed parking shall not be visible from the street. The placement of parking underground shall not raise the first non-parking floor of a structure above grade. Municipal parking facilities in the Center Business District shall be exempt from this provision.

4.4.7 Business Use in Other Districts

Whenever a business use as listed in Section 3.2. Schedule of Use Regulations is to be located or expanded in other than a business district (with the exception of the Industrial-1 District), whether permitted by a Board of Appeals Special Permit or variance or otherwise, the percentage area requirements specified in Table 1 in Section 4.4.2 shall be applicable, unless a variance has also been granted from the provisions of this Section.

4.4.8 Side and Rear Setbacks Adjoining Residential Districts

4.4.8.1 Business District

When an area changed to a Business District after April 15, 1952 adjoins a residential district, no building or structure for business use shall be placed or constructed within fifty (50) feet of the residential district boundary, and within said strip, which shall be suitably landscaped, there shall be no accessory parking or storage, except that the Board of Appeals may grant a special permit for fences, off-street parking or loading, or service drives.

4.4.8.2 Chestnut Street Business District

Where a lot in a Chestnut Street Business District adjoins a residential district, no building or structure for business use shall be placed or constructed within fifty (50) feet of the residential district boundary, and within said strip, the twenty-five (25) feet closest to the district boundary shall be suitably landscaped per specifications outlined below, and there shall be no accessory use. The remaining twenty-five (25) feet may be used for an accessory use not including a building or structure. Where a lot in the Chestnut Street Business District is adjacent to the MBTA commuter railroad right-of-way, the 50-foot buffer requirement shall not apply; however, adjacent to said right-of-way there shall be a 10-foot buffer which shall be suitably landscaped per the specifications outlined below and which shall not be used for any purpose.

4.4.8.3 Center Business District

Where a lot in a Center Business District adjoins a residential district, no building or structure for business use shall be placed or constructed within fifty (50) feet of the residential district boundary, and within said strip, the twenty-five (25) feet closest to the district boundary shall be suitably landscaped per specifications outlined below, and there shall be no accessory use. The remaining twenty-five (25) feet may be used for an accessory use not including a building or structure.

4.4.8.4 Other Business Districts

In an Avery Square Business, Hillside Avenue Business, or Neighborhood Business District no building or structure for a use not allowed in a residential district shall be placed within fifty (50) feet of

a residential district boundary, and the ten feet closest to such boundary shall be suitably landscaped as specified at Section 4.4.8.5. The remainder of the setback may be used for an accessory use not including a building or structure.

4.4.8.5 Landscaping Specifications

Where “suitable landscaping” is called for in paragraphs 4.4.8.2, 4.4.8.3, or 4.4.8.4, the following shall be complied with:

- (a) **Materials** – plant materials characterized by dense growth which will form an effective year-round screen shall be planted, or a fence or wall shall be constructed, to form the screen. Where a grill or open-work fence or wall is used it shall be suitable in appearance and materials. Screening may consist of both natural and man-made materials. To the extent practicable, existing trees shall be retained and used to satisfy the provisions of this section.
- (b) **Height** – screening shall be at least ten (10) feet in height when planted. Height shall be measured from the finished grade.
- (c) **Maintenance** – all required plant materials shall be maintained by the owner in a healthy condition and whenever necessary replaced with new plant materials to insure continued compliance with screening requirements. All required fences and walls shall be permanently maintained by the owner in good repair and presentable appearance and whenever necessary they shall be repaired or replaced.
- (d) **Lighting** -- all artificial lighting used to illuminate a parking or storage area, maneuvering space or driveway shall be arranged and shielded so as to prevent direct glare from the light source into any public street or private way or onto adjacent property

4.4.9 Building Entrances in the Chestnut Street Business, Avery Square Business, Hillside Avenue Business, and Neighborhood Business Districts

First-floor businesses shall have individual entrances accessed from the exterior of the building, except by Special Permit to be granted by the Planning Board in cases where such requirements would restrict redevelopment of an existing building.

Building entrances providing access to first and second-floor space shall be available from one or more streets on which the building fronts. The primary building entrance must be from Chestnut Street, Highland Avenue, Hillside Avenue, Broadmeadow Road, Great Plain Avenue, Central Avenue, Reservoir Street, or South Street unless the premises do not have frontage on one of those streets, or unless lot configuration makes it impractical to place all individual entrances on those streets.

4.4.10 Building Entrances in the Center Business District

First-floor businesses shall have individual entrances accessed from the exterior of the building, except by Special Permit to be granted by the Planning Board in cases where such requirements would restrict redevelopment of an existing building.

Building entrances providing access to first and second-floor space shall be available from one or more streets on which the building fronts and, if the building fronts on Chestnut Street, Highland Avenue, Great Plain Avenue or Chapel Street, the primary building entrances must be located on those streets.

4.4.11

Driveways for the purpose of providing drive-through customer service shall not be allowed in the Center Business District.

4.4.12 Dimensional Relief by Special Permit

Notwithstanding the foregoing to the contrary and subject to all other requirements of the district, the Planning Board acting as a special permit granting authority may issue a special permit for mixed use buildings allowed by special permit under Subsection 3.2.3.2 (q) in the Neighborhood Business District to:

- (a) increase the maximum floor area ratio to 0.7 and the building height to three (3) stories and forty (40) feet; and
- (b) reduce the minimum side and/or rear setback adjoining a residential district to twenty (20) feet provided said strip is suitably landscaped in accordance with the specifications in Section 4.4.8.5.

4.5 Dimensional Regulations for Highland Commercial-128

Minimum Lot Area (Sq. Ft.)	Minimum Lot Frontage (Ft.)	Front Setback (Ft.)	Side Setbacks (Ft.) (1) (6)	Rear Setback (Ft.) (1)(6)	Maximum Height (Ft.) (3)	Maximum Lot Coverage (2) (7)	Floor Area Ratio (4) (5)
15,000	100	5	10	10	54	80%	0.30

- (1) No side or rear setback required for shared parking structures between properties, but only on one side of each lot, leaving the other side- or rear yards open to provide access to the interior of the lot.

- (2) A minimum of 10% of total lot area must be open space. The open space area shall be landscaped and may not be covered with buildings or structures of any kind, access streets, ways, parking areas, driveways, aisles, walkways, or other constructed approaches or service areas.
- (3) No buildings shall exceed a height of 54 feet, with one exception. Buildings within 350 feet of Route 128 may reach a height of 68 feet. Provided, however, that no building shall exceed 41 feet in height unless it is more than 150 feet from a General Residence zoning district boundary. Structures erected on a building and not used for human occupancy, such as chimneys, heating-ventilating or air-conditioning equipment, elevator housings, skylights, cupolas, spires and the like may exceed the maximum building height provided that no part of such structure shall project more than 15 feet above the maximum allowable building height, the total horizontal coverage of all of such structures on the building does not exceed 25 percent, and all of such structures are set back from the roof edge by a distance no less than their height. The Planning Board may require screening for such structures as it deems necessary. Notwithstanding the above height limitations, cornices and parapets may exceed the maximum building height provided they do not extend more than 5 feet above the highest point of the roof.
- (4) A floor area ratio up to 1.5 may be permitted subject to a special permit from the Planning Board. See Section 6.8.
- (5) The calculation of floor area in determining floor area ratio shall not include parking areas or structures.
- (6) A 50-foot setback shall be required from a General Residence zoning district line. However, the Planning Board may grant a special permit to reduce said setback, but not to less than 20 feet.
- (7) The provisions of Section 4.4.7 of this bylaw shall not be applicable to the Highland Commercial-128 district.

4.5.1 Supplemental Dimensional Regulations

- (1) Parking structures must have an active ground floor use, such as retail, office, institutional, or display, on sides facing a public way. This requirement may be waived by the Planning Board if the developer can provide a suitable alternative that enhances pedestrian or open space use of the site. Parking structures must be located at least 20 feet from adjacent buildings, but may be attached to the building they are serving if all fire and safety regulations can be met.
- (2) All surface parking shall be located to the side or rear of the building.
- (3) First-floor businesses shall have individual entrances accessed from the exterior of the building, except by special permit to be granted by the Planning Board in cases where such requirements would restrict redevelopment of an existing building.

Building entrances providing access to first and upper level floor space shall be available from one or more of the streets on which the building fronts. The primary building entrance must be from

Highland Avenue, unless the premises do not have frontage on Highland Avenue, or unless lot configuration makes it impractical to place all individual entrances on that street.

- (4) Maximum uninterrupted facade length shall be 300 feet; if within 350 feet of a General Residence zoning district or river the uninterrupted facade length may not exceed 200 feet.

4.5.2 Floor Area Ratio, Incentives

In the Highland Commercial-128 District the maximum floor to area ratio (FAR) permitted by right shall be 0.3. However, for projects providing new roadways that are deemed by the Planning Board to be consistent with the Goals of the District Plan, a developer shall be allowed two additional square feet of gross floor area by right for every square foot of land used for roadway right of way purposes, up to a maximum of 15,000 additional square feet. Any additional roadway areas provided by the developer shall be deemed as part of total lot area for FAR calculation purposes. Said areas shall also be considered as impervious surfaces for the purpose of calculating maximum lot coverage.

4.6 Dimensional Regulations for Industrial Districts

4.6.1 Basic Requirements

District	Min. Lot Area	Min. Lot Frontage	Height Limitation
Industrial	10,000 SF	80 ft	3 stories (40 ft.)

4.6.2 Front and Side Setbacks

There shall be a minimum front setback of ten (10) feet for all lots zoned to a manufacturing district prior to April 15, 1952 and of twenty (20) feet for all other lots. (See Section 4.6.3 for further restrictions.)

4.6.3 Maximum Lot Coverage

Buildings or structures on any lot in an Industrial District devoted to a manufacturing use as listed in Section 3.2. Schedule of Use Regulations shall not cover more than sixty (60) percent of the lot area, if it is a corner lot, nor fifty (50) percent of the lot area if it is any other lot. No lot area on which there exists any building or structure shall be so reduced in size as to increase the covered portions thereof in the aggregate above the percentages respectively required.

4.6.4 Height Limitation

The limit of height of a building or structure shall be three (3) stories not to exceed forty (40) feet, provided that in no event shall any building contain more than three (3) floors used for occupancy.

4.6.5 Side and Rear Setbacks Adjoining Residential Districts

Where an area changed to a manufacturing or industrial district after April 15, 1955 adjoins a residential district, no building or structure for a nonresidential use shall be placed or constructed within fifty (50) feet of the residential district boundary, and within said strip, which shall be suitably landscaped, there shall be no accessory use including parking or storage, except that the Board of Appeals may grant a special permit for fences, off-street parking or loading, or service drives.

4.6.6 Driveway Openings

In that portion of a lot contained within the required front setback, there may be constructed not more than two (2) driveways for every one hundred fifty (150) feet or less of frontage on each way. Driveways shall be located so as to minimize conflict with traffic on streets and where good visibility and sight distances are available to observe approaching pedestrian and vehicular traffic. The width of a driveway for one-way traffic shall be a minimum of twelve (12) feet and a maximum of eighteen (18) feet, as measured at its narrowest point. The width of a driveway for two-way traffic shall be a minimum of eighteen (18) feet, and a maximum of twenty-five (25) feet, as measured at its narrowest point. These maximum widths may be increased in situations where it can be demonstrated to the satisfaction of both the Building Commissioner and Town Engineer that vehicles greater than 30 feet in length will be used to access or egress the premises.

4.7 Special Conditions

4.7.1 Specific Front Setbacks

Notwithstanding the front setback provisions herein, in the following locations the front setbacks indicated below shall apply:

- (a) On the northwesterly side of Highland Avenue between Cross Street and Arbor Street, there shall be a twenty (20) foot building setback line.

4.7.2 Height Limitation Exceptions in Business, Apartment, Industrial, and Industrial-1 Districts.

In Business, Industrial, and Industrial-1 Districts the limitation of height in feet in Section 4.4.3 and 4.6.4 shall not apply to towers, steeples, spires or domes, chimneys, ventilators, skylights, tanks, bulkheads, water tanks or scenery lofts which shall be at every point fifty (50) feet from the center line of any street and shall not cover more than twenty-five (25) percent of the area of the building upon which each is erected. No radio or television antenna or antennae tower shall exceed eighty (80) feet in height except that the Board of Appeals may grant a Special Permit in each instance for a height greater than eighty (80) feet.

In Apartment districts the limitation of height in feet in Section 4.3.1 shall not apply to the structures enumerated herein except that the height shall not exceed fifty-five (55) feet.

4.7.3 Minimum Side Line Setbacks for a Dwelling or Institutional Building in Certain Districts.

No part of any single or two-family dwelling or institutional building hereafter erected in an Apartment, Business, or Industrial District on a lot having a frontage of one hundred (100) feet or more shall be placed or constructed within fifteen (15) feet of the side lines of said lot. No part of any such dwelling or institutional building hereafter erected in an Apartment, Business, or Industrial District on a lot having a frontage of less than one hundred (100) feet shall be placed or constructed within ten (10) feet of the side lines of said lot.

4.7.4 Change in Dimensional Regulations by Special Permit

In Single Residence A, Single Residence B, General Residence Districts, the minimum front setback and the minimum side and rear line setback requirements may be reduced by not more than 10 percent, or the maximum lot coverage allowed may be increased by not more than 10 percent over the square footage allowed, provided that the increase in the area of lot covered may not exceed 150 square feet, by special permit granted by the Board of Appeals where the Board finds that the special permit may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent and purpose of this By-Law and subject to the provisions of Section 7.5.2.

This Section 4.7.4 shall apply only to buildings and structures that have been constructed pursuant to a building permit issued by the Building Commissioner. The purpose of this Section is to allow relief only in those unusual cases where excusable neglect or inadvertence have resulted in the construction of portions of buildings or structures in required setback areas, or in excess of maximum lot coverage requirements.

4.7.5 Historic Preservation Dimensional Special Permit

4.7.5.1 Purpose

The purpose of this by-law is to encourage the preservation and restoration of historic architectural features on existing historic buildings and structures in the community, by modifying certain dimensional standards that might be an impediment to such preservation and restoration efforts.

4.7.5.2 Applicability

Modification of dimension standards per a Historic Preservation Dimensional Special Permit shall be allowable in all zoning districts.

4.7.5.3 Historic Eligibility

For purposes of a Historic Preservation Dimensional Special Permit, the building or structure must be listed on one of the following:

- (a) The National Register of Historic Places;
- (b) The State (Commonwealth of Massachusetts) Register of Historic Places;
- (c) Inventory of Historic Assets of the Commonwealth for the Town of Needham, or designated for inclusion in such inventory, including those buildings listed for which complete surveys may be pending; and
- (d) Pending nominations in good standing to the National or State Register.

4.7.5.4 Special Permit

After making the findings required by Section 4.7.5.5 below, the Board of Appeals may, by special permit waive the front, side, and rear setbacks for the zoning district, by relaxing each by up to a maximum of 40%, as necessary.

4.7.5.5 Findings Required

In order to grant a special permit, the Board of Appeals shall find:

- (a) That the purpose of the permit is for the preservation and/or restoration of a historic architectural feature on an existing building and/or structure that is eligible under Section 4.7.5.3 above;
- (b) That the proposed renovation, repair, or addition, to the maximum extent feasible, preserves and/or restores the historical architectural features of the building, or structure;
- (c) That such modification of a dimensional requirement is required to enable the preservation and/or restoration of the historical architectural features of the building or structure and that failure to grant the special permit is likely to result in construction or continuation of an inappropriate physical modification, or the destruction or deterioration of the existing historical architectural features;
- (d) That the proposed renovation, repair, or addition has been determined by vote of the Needham Historical Commission to be a historically accurate architectural restoration;
- (e) That the building or structure will remain on the site on which it was originally constructed; and
- (f) That the proposed use will not generate negative impacts to the surrounding area or zoning district or that any negative impacts generated may be feasibly mitigated.

4.8 Dimensional Regulations for NEBC

Minimum Lot Area (Sq. Ft.)	Minimum Lot Frontage (Ft.)	Front Setback (Ft.) (4) (5)	Side Setbacks (Ft.) (3) (5)	Rear Setback (Ft.) (3)(5)	Maximum Height (Ft.) (1)	Maximum Lot Coverage (2) (8)	Floor Area Ratio (6) (7)
40,000	100	15	20	20	72	65%	1.00

- (1) If the Planning Board determines that the proposed structure is properly accessible to fire fighting equipment, it may allow by special permit a maximum height of up to 84 feet. Further, all buildings within 350 feet of a river or a lake shall be limited to a height of 54 feet. In no instance shall any building exceed 41 feet in height unless it is more than 350 feet from a General Residence or Single Residence B zoning district boundary. Structures erected on a building and not used for human occupancy, such as chimneys, heating-ventilating or air-conditioning equipment, elevator housings, skylights, cupolas, spires and the like may exceed the maximum building height provided that no part of such structure shall project more than 15 feet above the maximum allowable building height, the total horizontal coverage of all of such structures on the building does not exceed 25 percent, and all of such structures are set back from the roof edge by a distance no less than their height, provided that the Planning Board may by Special Permit increase the height limit by not more than 5 additional feet. The Planning Board may require screening for such structures as it deems necessary. Notwithstanding the above height limitations, cornices and parapets may exceed the maximum building height provided they do not extend more than 5 feet above the highest point of the roof.
- (2) Maximum lot coverage shall be 65% for all projects. However, if a project is designed such that at least 65% of the required landscaped area immediately abuts at least 65% of the required landscaped area of an adjoining project for a distance of at least 50 feet the maximum lot coverage may be increased to 75%.
- (3) No side or rear setback is required for shared parking structures between adjoining properties, but only on one side of each lot, leaving the other side- or rear yards open to provide access to the interior of the lot.
- (4) A 25-foot front yard setback must be maintained for structured parking.
- (5) A 50-foot setback must be maintained from any General Residence zoning district line. However, the Planning Board may grant a special permit to reduce said setback, but not to less than 20 feet.
- (6) A floor area ratio of up to 1.75 may be allowed by a special permit from the Planning Board. See Section 6.8. Further, the Planning Board may allow a floor area ratio of up to 2.0, by special permit, where the applicant demonstrates, to the Board's satisfaction, that the proposed use will not generate peak hour trips in excess of 0.6 trips per 1,000 square feet of total development area.
- (7) The calculation of floor area in determining floor area ratio shall not include parking areas or parking structures.
- (8) The provisions of Section 4.4.7 of this bylaw shall not be applicable to the NEBC district.

4.8.1 Supplemental Dimensional Regulations for New England Business Center

- (1) Parking structures and surface lots may not be located within 50 feet of the intersection of the exterior street lines of a corner lot or fronting on public parks.
- (2) All surface parking shall be located to the side or rear of the principal building(s). A landscaped buffer area, except for approved access ways and walkways, at least 20 feet in width as measured from the layout of the roadway providing frontage, shall be established along the street frontage. The buffer area shall be planted with grass, medium height shrubs, and trees. Where appropriate, street trees shall be planted at least every 40 feet along the frontage. Notwithstanding the provisions of this subsection, the Planning Board may permit a limited number of parking spaces (not more than 2% of total off-street parking required or not more than six spaces, whichever is less) for short term drop-off parking purposes at the main entrance of the building, if the Planning Board finds that the overall facade design, site plan, and operational characteristics of the facility will be improved thereby.
- (3) If a separate structure, any parking structure must be located a minimum of 20 feet from adjacent buildings. However, parking structures may be attached to the primary building they are servicing if all fire and safety regulations are met.
- (4) A minimum of 25% of total lot area must be open space. The open space area shall be landscaped and may not be covered with buildings or structures of any kind, access streets, ways, parking areas, driveways, aisles, walkways, or other constructed approaches or service areas. Notwithstanding the preceding sentence, open space shall include pervious surfaces used for ways, access streets, parking areas, driveways, aisles, walkways, or other constructed approaches or service areas. (Pervious surfaces shall not preclude porous pavement, porous concrete, and/or other permeable pavers.)
- (5) Buildings must have a public entrance facing one or more of the streets on which the building fronts.
- (6) Maximum uninterrupted facade length shall be 300 feet, or 200 feet if within 350 feet of a General Residence district zoning boundary, a river, or a lake.

4.8.2 Floor Area Ratio, Incentives

In the New England Business Center District the maximum floor to area ratio (FAR) permitted by right shall be 1.0. However, for projects providing open space and/or new roadways that are deemed by the Planning Board to be consistent with the Goals of the District Plan, a developer shall be allowed one and one-half (1.5) additional square feet of gross floor area by right for every square foot of land used for the aforementioned purposes, up to a maximum of 15,000 additional square feet of development. Any additional roadway area provided by the developer, consistent with this section, shall be deemed as part of total lot area for FAR calculation purposes and said areas shall also be considered as impervious surfaces for the purpose of calculating maximum lot coverage. Open space areas, consistent with this

section, shall also be deemed part of total lot area for FAR calculation purposes and said areas shall be considered as landscaped areas for the purpose of calculating lot coverage.

4.8.3

The Planning Board may, by special permit, waive any or all dimensional requirements set forth above in this Section 4.8 (including sections 4.8.1 and 4.8.2), by relaxing each by up to a maximum percentage of 25% if it finds that, given the particular location and/or configuration of a project in relation to the surrounding neighborhood, such waivers are consistent with the public good, that to grant such waiver(s) does not substantially derogate from the intent and purposes of the By-Law or the Goals of the District Plan cited in Section 6.8.1(b) of these Zoning By-Laws, and that such waivers are consistent with the requirements of Section 6.8. This section does not authorize the Planning Board to waive the maximum height regulations. (By way of example, the 15' front yard setback could be waived to 11.25'; the 65% lot coverage could be waived to 81.25%; or the 40,000 sq. ft. minimum lot area could be waived to 30,000 sq. ft.)

4.9 Dimensional Regulations for Mixed-Use 128

Minimum Lot Area (Sq. Ft.)	Minimum Lot Frontage (Ft.)	Front Setback (Ft.) (1)	Side Setbacks (Ft.) (1) (3)	Rear Setback (Ft.) (3)	Maximum Height (Ft.) (1)	Maximum Lot Coverage (2) (4) (7)	Floor Area Ratio (5) (6)
10,000	100	5	10	10	70	65%	1.00

- (1) All buildings shall be limited to a height of 70 feet, except that, buildings within 350 feet of a river shall be limited to a height of 54 feet. Notwithstanding the forgoing, the Planning Board may allow by special permit a maximum height of up to 84 feet except within 350 feet of a river. If the height of a building is increased above the height of 54 feet, the front setback shall be increased to 15 feet and the side setback to 20 feet. Structures erected on a building and not used for human occupancy, such as chimneys, heating-ventilating or air conditioning equipment, elevator housings, skylights, cupolas, spires and the like may exceed the maximum building height provided that no part of such structure shall project more than 15 feet above the maximum allowable building height, the total horizontal coverage of all of such structures on the building does not exceed 25 percent, and all of such structures are set back from the roof edge by a distance no less than their height. The Planning Board may require screening for such structures as it deems necessary. Notwithstanding the above height limitations, cornices and parapets may exceed the maximum building height provided they do not extend more than 5 feet above the highest point of the roof.
- (2) Maximum lot coverage shall be 65% for all projects. However, if a project is designed such that at least 65% of the required landscaped area immediately abuts at least 65% of the required landscaped area of an adjoining project for a distance of at least 50 feet the maximum lot coverage may be increased to 75%.

- (3) No side or rear yard is required for shared parking structures between adjoining properties, but only on one side of each lot, leaving the other side- or rear yards open to provide access to the interior of the lot.
- (4) A minimum of 20% of total lot area must be open space. The open space area shall be landscaped and may not be covered with buildings or structures of any kind, access streets, ways, parking areas, driveways, aisles, walkways, or other constructed approaches or service areas. Notwithstanding the preceding sentence, open space shall include pervious surfaces used for ways, access streets, parking areas, driveways, aisles, walkways, or other constructed approaches or service areas. (Pervious surfaces shall not preclude porous pavement, porous concrete, and/or other permeable pavers.)
- (5) A floor area ratio of up to 1.75 may be allowed by a special permit from the Planning Board. See Section 6.8. Further, the Planning Board may allow a floor area ratio of up to 2.0, by special permit, where the applicant demonstrates, to the Board's satisfaction, that the proposed use will not generate peak hour trips in excess of 0.6 trips per 1,000 square feet of total development area.
- (6) The calculation of floor area in determining floor area ratio shall not include parking areas or structures.
- (7) The provisions of Section 4.4.7 of this bylaw shall not be applicable to the Mixed-Use 128 district.

4.9.1 Supplemental Dimensional Regulations

- (1) Parking structures and surface parking lots may not be located such that they front on public parks.
- (2) Parking structures must have an active ground floor use, such as retail, office, institutional, or display, on sides facing a public way. This requirement may be waived by the Planning Board if the developer can provide a suitable alternative that enhances pedestrian or open space use of the site. Structured parking must be located at least 20 feet from adjacent buildings, but may be attached to the building it is servicing if all fire and safety requirements can be met.
- (3) Buildings must have a public entrance facing one or more of the streets on which the building fronts.
- (4) Maximum uninterrupted facade length shall be 300 feet. However, for buildings within 350 feet of a General Residence district zoning line or river, the uninterrupted facade length shall not exceed 200 feet.

4.9.2 Floor Area Ratio, Incentives

In the Mixed Use-128 District the maximum floor area ratio (FAR) permitted by right shall be 1.00. However, for projects providing open space and/or new roadways that are deemed by the Planning Board to be consistent with the Goals of the District Plan, a developer shall be allowed one and one half (1.5) additional square feet of gross floor area by right for every square foot of land used for the aforementioned purposes, up to a maximum of 15,000 additional square feet. Any additional roadway

area provided by the developer, consistent with this section, shall be deemed as part of total lot area for FAR calculation purposes, and shall be considered as impervious surfaces for the purpose of calculating maximum lot coverage. Open space areas, consistent with this section, shall be deemed part of total lot area for FAR calculation purposes and said areas shall be considered as landscaped areas for purposes of calculating lot coverage.

4.9.3

The Planning Board may, by special permit, waive any or all dimensional requirements set forth above in this Section 4.9 (including sections 4.9.1 and 4.9.2), by relaxing each by up to a maximum percentage of 25% if it finds that, given the particular location and/or configuration of a project in relation to the surrounding neighborhood, such waivers are consistent with the public good, that to grant such waiver(s) does not substantially derogate from the intent and purposes of the By-Law or the Goals of the District Plan cited in Section 6.8.1(b) of these Zoning By-Laws, and that such waivers are consistent with the requirements of Section 6.8. This section does not authorize the Planning Board to waive the maximum height regulations. (By way of example, the 15’ front yard setback could be waived to 11.25’; the 65% lot coverage could be waived to 81.25%; or the 40,000 sq. ft. minimum lot area could be waived to 30,000 sq. ft.)

4.10 Dimensional Regulations for Industrial-1 District

4.10.1 Basic Requirements

Min. Lot Area	Min. Lot Frontage	Minimum Setbacks	Maximum Height
20,000 SF	100 ft.	Front - 20 ft. Side – 20 ft. Rear – 10 ft.	2 stories – 30 ft.

4.10.2 Floor Area Ratio

In Industrial-1 Districts, the maximum floor area ratio (FAR) shall be 0.5, except that a FAR of 0.625 or 0.75 is permissible under the conditions described as follows:

FAR of 0.625, if at least twice the minimum front setback is provided, and if at least one-half of the required parking is provided in or under a building or structure, and if 15 percent of the parking area is maintained as landscaped area;*

FAR of 0.75, if at least twice the minimum front setback is provided, and if all of the required parking is provided in or under a building or structure, and if 20 percent of the parking area is maintained as landscaped area.*

*For purposes of calculating the required landscaped area, assume all parking spaces are located at grade in exterior parking areas.

4.10.3 Driveway Openings

In that portion of a lot contained within the required front setback, there may be constructed not more than two (2) driveways for every one hundred fifty (150) feet or less of frontage on each way. Driveways shall be located so as to minimize conflict with traffic on streets and where good visibility and sight distances are available to observe approaching pedestrian and vehicular traffic. The width of a driveway for one-way traffic shall be a minimum of twelve (12) feet, and a maximum of eighteen (18) feet, as measured at its narrowest point. The width of a driveway for two-way traffic shall be a minimum of eighteen (18) feet, and a maximum of twenty-five (25) feet, as measured at its narrowest point. These maximum widths may be increase in situations where it can be demonstrated to the satisfaction of both the Building Commissioner and Town Engineer that vehicles greater than 30 feet in length will be used to access or egress the premises.

4.11 Dimensional Regulations for Highway Commercial Districts

4.11.1 Highway Commercial 1

Minimum Lot Area (Sq. Ft.)	Minimum Lot Frontage (Ft.)	Front Setback (Ft.)	Side Setback (Ft.)	Rear Setback (Ft.)	Maximum Height (Ft.)	Maximum Stories	Maximum Lot Coverage	Floor Area Ratio
		(1)	(1) (3)	(1) (3)	(1)	(1)	(2) (4)	(5) (6)
20,000	100	5	10	10	56	4	65%	0.70

- (1) a. All buildings shall be limited to a height of 56 feet and four stories, except that buildings within 200 feet of Highland Avenue or the extension of the right-of-way line as described below in paragraph c. and buildings within 200 feet of Gould Street shall be limited to a height of 35 feet and 2 ½ stories as-of-right. If the height of a building is increased above the height of 35 feet, the front setback shall be increased to 15 feet and the side and rear setbacks to 20 feet except that, along the MBTA right-of-way the side and rear yard setbacks shall be 10 feet.

b. By Special Permit from the Planning Board, the maximum height of a building may be increased to 3 stories and 42 feet within 200 feet of Highland Avenue or the extension of the right-of-way line as described below in paragraph c. and within 200 feet of Gould Street. By Special Permit from the Board, the maximum height of a building may be further increased to the following limits: 5 stories and 70 feet provided the building is not located within 200 feet of Highland Avenue or the extension of the right-of-way line as described below in paragraph c. or within 200 feet of Gould Street.

c. (i) The line from which the 200-foot setback from Highland Avenue referred to in paragraphs a. and b. above shall be measured is that line which starts at the point of curvature on Highland Avenue at Gould Street marked by a stone bound/drill hole (SB/DH) and runs northeasterly

N63°56'51"E by the Highland Avenue 1980 State Highway Alteration 361.46 feet to a stone bound/drill hole, then continues on the same northeasterly course an additional 330.54 feet for a total distance from the first mentioned bound of 700 feet. Reference is made to a plan entitled "Plan of Land Gould Street, Needham, MA", prepared by Andover Engineering, Inc., dated July 27, 2000, last revised September 20, 2001, recorded in the Norfolk County Registry of Deeds as Plan No. 564 of 2001, Plan Book 489. (ii) The line from which the 50-foot landscaped setback from Highland Avenue referred to in paragraph d. below shall be measured is that line which starts at the point of curvature on Highland Avenue at Gould Street marked by a stone bound/drill hole (SB/DH) and runs northeasterly N63°56'51"E by the Highland Avenue 1980 State Highway Alteration 361.46 feet to a stone bound/drill hole. If the 1980 State Highway Alteration along Highland Avenue is superseded by a subsequent State Highway Alteration, the 50-foot landscaped setback from Highland Avenue shall be measured from the newly-established street line.

d. Buildings and structures abutting Highland Avenue for the distance described in subsection (1) c. (ii) above and/or abutting Highland Avenue as it continues southwesterly to the intersection with Gould Street and/or abutting Gould Street shall be set back at least 50 feet from said streets. Buildings and structures abutting the layout of Route 128/95 beyond said Highland Avenue distance from stone bound to stone bound shall be set back at least 20 feet from said Route 128/95 layout. Notwithstanding the location or height of any building and structures, the required 50-foot or 20-foot setback shall be a landscaped, vegetative buffer area, which shall be required along the aforementioned street frontages and said layout in order to screen the development. Driveway openings, sidewalks, walkways and screened mechanical equipment shall be permitted in the buffer area.

e. Structures erected on a building and not used for human occupancy, such as chimneys, heating-ventilating or air conditioning equipment, solar or photovoltaic panels, elevator housings, skylights, cupolas, spires and the like may exceed the maximum building height provided that no part of such structure shall project more than 15 feet above the maximum allowable building height, the total horizontal coverage of all of such structures on the building does not exceed 25 percent, and all of such structures are set back from the roof edge by a distance no less than their height. The Planning Board may require screening for such structures as it deems necessary. Notwithstanding the above height limitations, cornices and parapets may exceed the maximum building height provided they do not extend more than 5 feet above the highest point of the roof.

f. For purposes of clarity, the required building setbacks and allowed envelopes (including setbacks) for allowance of additional height above 35 feet for the as-of right circumstance and 42 feet for the special permit circumstance are shown on figures 1 and 2 below.

Figure 1:

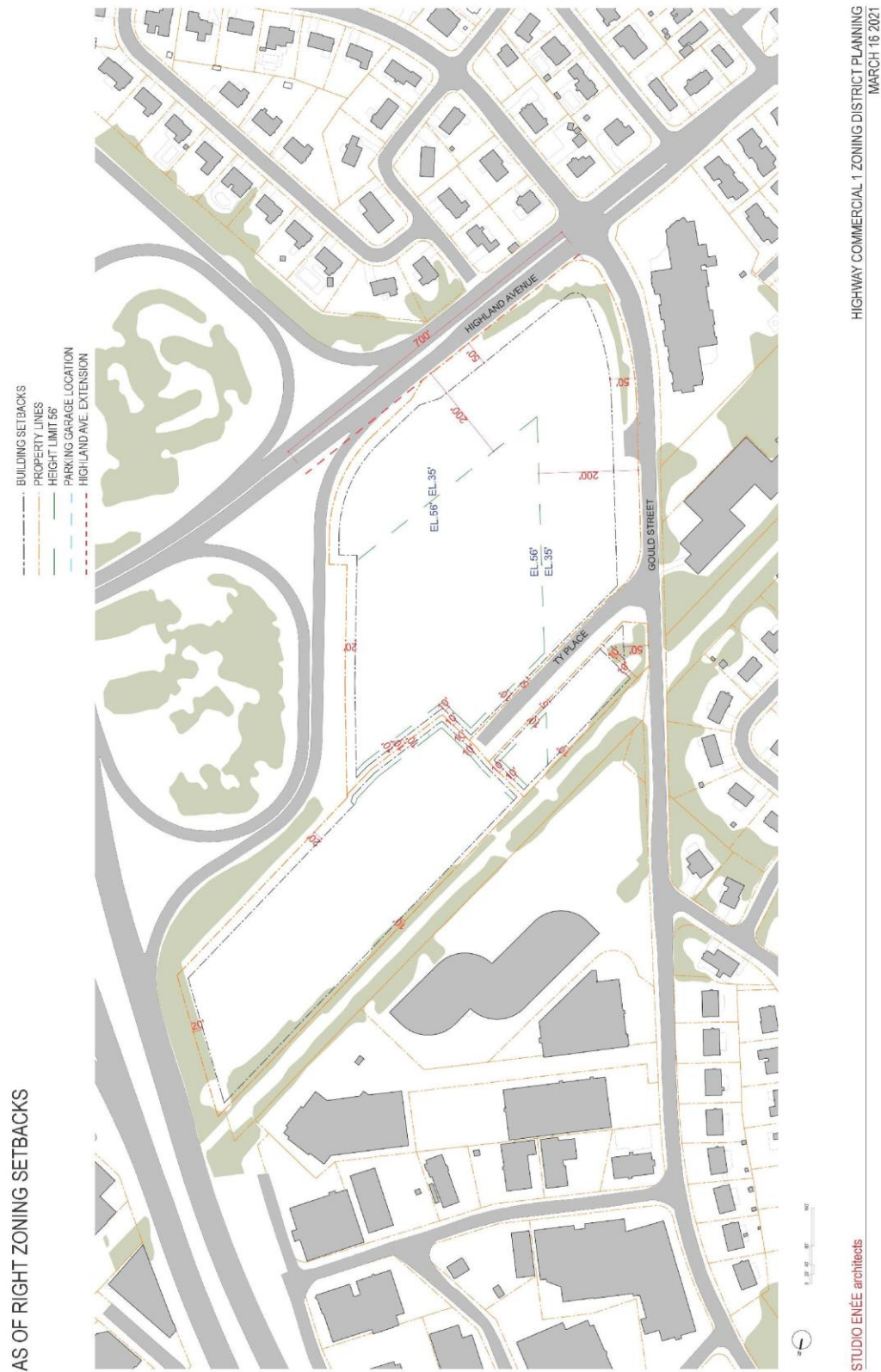
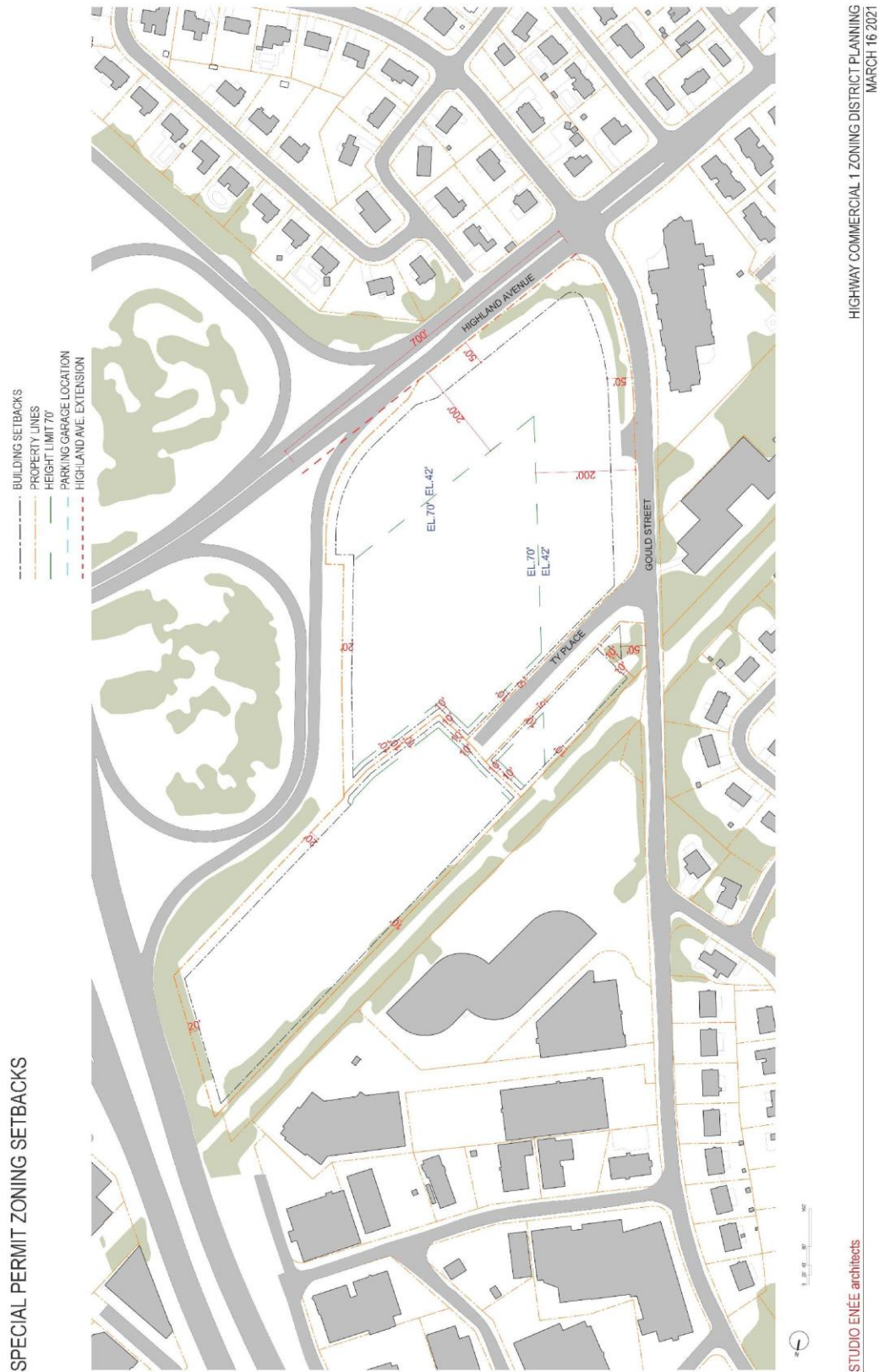


Figure 2:



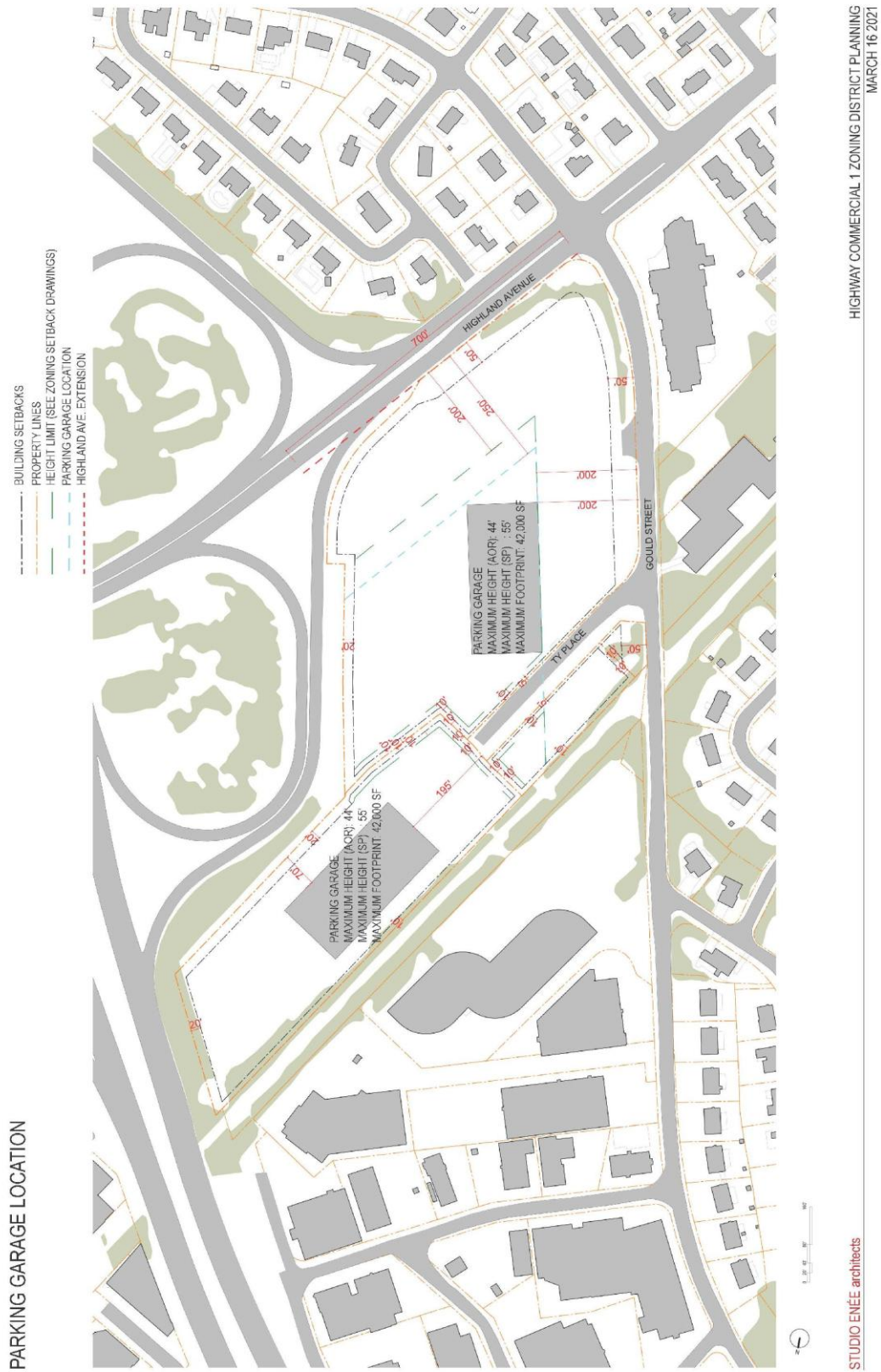
- (2) Maximum lot coverage shall be 65% for all projects. However, if a project is designed such that at least 65% of the required landscaped area immediately abuts at least 65% of the required landscaped area of an adjoining project for a distance of at least 50 feet, the maximum lot coverage may be increased to 75%.
- (3) No side or rear yard setback is required for shared parking structures between adjoining properties, but only on one side of each lot, leaving the other side or rear yards open to provide access to the interior of the lot.
- (4) A minimum of 25% of total lot area must be open space. The open space area shall be landscaped and may not be covered with buildings or structures of any kind, access streets, ways, parking areas, driveways, aisles, walkways, or other constructed approaches or service areas. Notwithstanding the preceding sentence, open space may include pervious surfaces used for walkways and patios. (Pervious surfaces shall not preclude porous pavement, porous concrete, and/or other permeable pavers.)
- (5) A floor area ratio of up to 1.35 may be allowed by a special permit from the Planning Board. In granting such special permit, the Planning Board shall consider the following factors: the ability of the existing or proposed infrastructure to adequately service the proposed facility without negatively impacting existing uses or infrastructure, including but not limited to, water supply, drainage, sewage, natural gas, and electric services; impact on traffic conditions at the site, on adjacent streets, and in nearby neighborhoods, including, but not limited to, the adequacy of the roads and intersections to safely and effectively provide access and egress; the environmental impacts of the proposal; and the fiscal implications of the proposal to the Town. In granting a special permit, the Planning Board shall also consider any proposed mitigation measures and whether the proposed project's benefits to the Town outweigh the costs and adverse impacts, if any, to the Town.
- (6) The calculation of floor area in determining floor area ratio shall not include parking areas or structures but shall include such active ground floor uses, such as retail, office, institutional, or display as are allowed by Section 4.11.2 (2).

4.11.2 Supplemental Dimensional Regulations

- (1) Notwithstanding Section 3.2.7.1(m) and any other provision of this Section 4.11 to the contrary, a parking garage, even if it is for an as-of-right development, may not exceed 44 feet in height, may not have a building footprint in excess of 42,000 square feet and may not be located within 250 feet of Highland Avenue or the extension of the right-of-way line described in Section 4.11.1 (1) c. (i) or within 200 feet of Gould Street. Notwithstanding the above, the maximum height of a parking garage may be increased to 55 feet by Special Permit from the Planning Board. For purposes of clarity the height, coverage and location requirements for the as-of-right and special permit parking garage circumstance are shown on figure 3 below.

- (2) Parking structures may have an active ground floor use, such as retail, office, institutional, or display. Structured parking must be located at least 20 feet from adjacent buildings but may be attached to the building it is servicing if all fire and safety requirements are met.
- (3) Maximum uninterrupted facade length shall be 200 feet.
- (4) All setback, height, and bulk requirements applicable to this Section 4.11 are contained in this Section and no additional requirements occasioned by this district abutting Route 128/95's SRB district shall apply.

Figure 3



4.11.3 Special Permit Requirements

In approving any special permit under Section 3.2.7.2 and/or Section 4.11, or for any project proceeding under the Highway Commercial 1 district provisions which constitute a Major Project under Section 7.4.2, the Planning Board shall consider the following design guidelines for development: (a) The proposed development should provide or contribute to providing pedestrian and neighborhood connections to surrounding properties, e.g., by creating inviting buildings or street edge, by creating shared publicly accessible green spaces, and/or by any other methods deemed appropriate by the Planning Board; (b) Any parking structure should have a scale, finish and architectural design that is compatible with the new buildings and which blunts the impact of such structures on the site and on the neighborhood; (c) The proposed development should encourage creative design and mix of uses which create an appropriate aesthetic for this gateway to Needham, including but not limited to, possible use of multiple buildings to enhance the corner of Highland Avenue and Gould Street, possible development of a landscape feature or park on Gould Street or Highland Avenue, varied façade treatments, streetscape design, integrated physical design, and/or other elements deemed appropriate by the Planning Board; (d) The proposed development should promote site features and a layout which is conducive to the uses proposed; (e) The proposed development should incorporate as many green building standards as practical, given the type of building and proposed uses; (f) The proposed development should be designed and conditioned to reduce or mitigate adverse impacts on adjacent properties or the surrounding area such as those resulting from excessive traffic congestion or excessive demand for parking; and (g) The proposed development shall include participation in a transportation demand management program to be approved by the Planning Board as a traffic mitigation measure, including but not limited to, membership and participation in an integrated or coordinated shuttle program.